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In Memoriam

FIELD-MARSHAL H.R.H. THE DUKE OF CONNAUGHT K.G., K.T., K.P., G.C.B., G.C.S.I., G.C.M.G., G.C.I.E., G.C.V.O., G.B.E., V.D.

THE Council and Members have to deplore the death of Field-Marshal the Duke of Connaught who had been President of the Institution since 1904. His Royal Highness died on 17th January, 1942, at the great age of ninety-one.

He was the last surviving son of Queen Victoria, and in him the Empire has lost a Royal Prince who had served in or visited most parts of it and had achieved well deserved popularity with its many peoples. He was, however, first and foremost a soldier, and the Army has lost a comrade who loved it and everything connected with it.

Born on 1st May, 1850, on the 81st birthday of the great Duke of Wellington, he became by the Queen's command, the Duke's godson and received his name of Arthur. Thus, from the first, he seemed to be destined for the profession of arms. At sixteen he was sent to the Royal Military Academy, Woolwich, but he was not allowed to enter into the communal life of the Cadets. He lived with Major (later General Sir Howard) Elphinstone, R.E., his military tutor, and Lieutenant Pichard, R.A., his orderly officer—both V.C. men—at the Ranger's House in Greenwich Park. On completion of the course in June, 1868, he was gazetted Lieutenant of the Royal Engineers and went through a practical course of field engineering at the School of Military Engineering, Chatham, of which Sir Lintorn Simmons was then the Commandant.

In November of the same year he was transferred to the Royal Artillery to serve in "B" Battery R.H.A., and in August, 1869, to the Rifle Brigade and posted to the 1st Battalion then serving in Canada. He remained there, with the usual home leave, for four years. Thus began his connection with the great Dominion which he was later to govern.

From October, 1873, to April, 1874, he was an acting Brigade Major, and then in August, 1875, Brigade Major at Aldershot.

During this period, in May, 1874, at the age of twenty-four, he was created Duke of Connaught and Strathearn and ceased to be known as Prince Arthur (Prince Patrick to the Irish, when he visited their island).

In August, 1875, to complete his experience of the various arms, he was promoted Major in the 7th Hussars, then at Aldershot, and nine months later served a short time as Brigade Major of the Cavalry Brigade, until 1st July, 1875, when he proceeded to Gibraltar to act as A.A.G.—then the title of the senior staff officer—for six months.

In 1876 he was appointed to the command of the 1st Battalion of the Rifle Brigade then stationed in Dublin.

In 1879 he married Princess Louise Margaret of Prussia, daughter of the Prince Friedrich Karl, who had commanded the German Third Army in the Franco-Prussian War. Bagshot Park, conveniently near Aldershot, became his permanent residence.

Given the brevet of Colonel in May, 1880, and a few days later promoted Major-General at the age of thirty, he was appointed to command an infantry brigade at Aldershot, remaining in this post for just over three years.

Thus far he had enjoyed an experience of both staff and regimental work which placed him in advance of the officers of his time, and even a little active service in dealing, whilst in Canada, with Fenian raids. The Staff College in those days was held in no particular esteem, practical knowledge and service with troops being regarded as more important than theoretical training. In 1882 the crown was put on the Duke's education by his proceeding on service to Egypt in command of the Guards Brigade, formed for the occasion.

He was next to have experience in another part of the Empire, being appointed in November, 1883, to the command of the Meerut Division. In India he remained until 1890, with a brief interval of leave at home in the autumn of 1885 and again in 1887, for Queen Victoria's Jubilee. On his return from leave in 1885 he had been transferred to the Rawal Pindi command, and at the end of 1886, as Lieutenant-General, to be Commander-in-Chief in Bombay, and Lieutenant-Governor of the Province.

On quitting India, in August, 1890, he was given the Southern Command, which then had its headquarters at Portsmouth; and in the autumn of 1893, he succeeded Sir Evelyn Wood in the

command at Aldershot, where he remained for the full five years. Those were the times of "field days" in tunics, with very limited areas available for training. With the Duke's influence, the use of more ground was obtained, and in 1895 there were manœuvres, after an interval of over twenty years, carried out in the New Forest.

In January, 1900, after an interval partly spent in travel, he was appointed Commander-in-Chief in Ireland in place of Field-Marshal Lord Roberts, who had left to command in the South African War, and he held the post for four years. In June, 1902, he was promoted to the rank of Field-Marshal, and after the Coronation of King Edward VII, as representative of His Majesty, he travelled to India with the Duchess, to perform the duties of presiding at the Durbar and at the proclamation of King Edward.

On the 1st May, 1904, under the new Army Council system and the changes in the Army following the report of the Esher Committee, the Duke was given the new appointment of Inspector-General of the Forces, which carried with it the Presidency of the Selection Board.

The Duke was now fifty-four, little more than half-way through his life and at the zenith of his powers. He was practically Commander-in-Chief, with the Army Council to carry out the routine administrative work. He was, as the Esher Report stated, "to provide the Secretary of State and the Army Council with eyes and ears." It was his business to report "on the efficiency of officers and men, on the handling of the troops, on the standard and system of training, on the suitability of equipment, and generally on all that affects the readiness of the Forces for War."

At the end of 1907 a new post was created, that of Field-Marshal Commanding-in-Chief and High Commissioner in the Mediterranean, with headquarters at Malta, and with the consent of Edward VII the Duke was transferred to fill it. He held this appointment until July, 1909, when he resigned, being succeeded by General Sir Ian Hamilton.

His next important public duty was to represent the King in 1910 at the ceremony of opening the First Parliament of the Union of South Africa. In the following year he was appointed Governor-General of Canada, and with his Duchess and Princess Patricia at his side—his elder daughter had in 1905 married

H.R.H. the Crown Prince of Sweden—performed the duties of the head of the Dominion with more than conspicuous success for five years, including the first years of the German War of 1914-18.

At sixty-six the Duke returned home, his active official life of devoted military and administrative service finished. The royal rank which had secured to him such rapid promotion and early experience as fall to the lot of few, nevertheless stood in the way of high command on active service and this was always a disappointment to him ; but even in his later years he still found much to do and his interest in the Army and India and the great Dominions never flagged.

His interest in the Royal United Service Institution was very real, and he made a number of valuable gifts to its collection of uniforms and head-dresses. When, not long before the War, suggestions were being made that the Museum should be turned out of the Banqueting House in order that that noble building should be used for political junketings, the Duke made no secret of his disapproval. The Centenary Celebration in 1932 was a notable occasion when he honoured the Institution with his presence.

Among other activities, he was Master of the Corporation of Trinity House. The calls on him were frequent and he remained to the last a well-known and prominent figure in the public eye.

From an old Print.

THE FIRST PRESENTATION OF THE VICTORIA CROSS
HYDE PARK, 26th JUNE, 1857

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THE FIRST PRESENTATION OF THE VICTORIA CROSS

By J. O. Robson

EARLY in the morning of 26th June, 1857, a crowd of over 100,000 people assembled in Hyde Park to see the first presentation of the Victoria Cross by Queen Victoria. The day was fine and, in contrast to the more intimate investitures of modern times, the ceremony was a magnificent military spectacle. The officers and men who were to receive the decoration were the heroes of the day, but Londoners welcomed this chance of seeing also many of the Generals whose names had become familiar during the recent war in the Crimea.

The troops started to form up at 8.30 a.m. facing Park Lane. They were under the command of Lieutenant-General Sir Colin Campbell, G.C.B., who had won his spurs in the Peninsula and had, three years previously, led the Highland Brigade up the Alma heights. The Earl of Cardigan, K.C.B., of Light Brigade fame, commanded the cavalry, which consisted of the 1st and 2nd Life Guards, the 6th Inniskilling Dragoons, and his old regiment the 11th Hussars. The Royal Artillery was under Major-General Sir Fenwick Williams, K.C.B., the valiant defender of Kars, and there were also present one company of the Royal Engineers, three battalions of Foot Guards, one battalion of the Royal Marines, the 79th Cameron Highlanders, and the 2nd Battalion of the Rifle Brigade. The Navy was represented by a hundred men from the "Excellent" and the "Osborne." The small size of this detachment was criticised in Parliament, where the view was expressed that at least a thousand naval ratings should have been on parade.

Just before ten o'clock a salute from the guns announced the approach of the Royal party. Her Majesty was accompanied by an impressive cavalcade composed of her personal attendants, officers of the Staff,

equerries, A.D.Cs., foreign officers, and Lords Lieutenant of Counties. The escort was found by the Royal Horse Guards.

The Queen wore suitably adapted Field-Marshal's uniform. Red and white feathers drooped from a round black hat, the scarlet tunic was open at the neck, and over the left shoulder she wore the ribbon of the Garter and a gold and crimson sash. A dark blue skirt set off well the gold lace on her charger's saddle-cloth, and on her left arm she wore a mourning band for her aunt, George III's daughter Mary, who married Frederick, Duke of Gloucester, and who had died that April.

As Her Majesty took up her position for the ceremony her husband was on her left. It is interesting to note that this was his first official appearance as Prince Consort, which title had been conferred upon him by Royal Letters Patent only the day before. On the Queen's right was Prince Frederick William of Prussia. He married the Princess Royal in 1858 and their son became William II, the last German Emperor. The Princess Royal and her sister Princess Alice watched the parade from the grand stand, having driven to the Park in a carriage with the Royal cortege. Immediately on Prince Frederick's right were the Prince of Wales, later King Edward VII, then a boy of fifteen, and his twelve year old brother, Prince Alfred, afterwards Duke of Edinburgh and reigning Duke of Saxe-Coburg-Gotha. Both Princes were mounted on ponies and were dressed in Highland garb ; bonnet, plaid, and tartan trews. Lady Churchill and Lady Codrington were also with the Royal party.

Those who were to receive the Victoria Cross had been drawn up in front of the troops. As soon as all was ready they started to file past Her Majesty, and as each man's turn came Lord Panmure, the Secretary of State for War, handed a cross to the Queen, who stooped from her saddle and fixed it to a loop on the man's breast. This ceremony took but a short while, after which the troops marched past in slow and quick time.

The following officers and men received the Victoria Cross that day at the hands of the Queen :—

Royal Navy

Commander Henry James Raby.
Commander John Bythesea.
Commander Hugh Talbot Burgoyne.
Lieutenant Charles Davis Lucas.
Lieutenant William Nathan Wrighte Hewett.
Mr. John Robarts, Gunner.
Mr. Joseph Kellaway, Boatswain.
Mr. Henry Cooper, Boatswain.
Seaman Joseph Trewavas.
Seaman Thomas Reeves.
Boatswain's Mate Henry Curtis.
Captain of the Mast George Ingoueville.

Royal Marines

Lieutenant George Dare Dowell, R.M.A.
Bombardier Thomas Wilkinson, R.M.A.

The Army

Sergeant-Major John Grieve, Royal Scots Greys.
Private Samuel Parkes, 4th Light Dragoons.
Lieutenant Alexander Roberts Dunn, 11th Hussars.
Troop Sergeant-Major John Berryman, 17th Lancers.
Lieutenant-Colonel Matthew Charles Dixon, R.A.
Captain Andrew Henry, Land Transport Corps, late R.A.
Captain Gronow Davis, R.A.
Sergeant Daniel Cambridge, R.A.
Gunner and Driver Thomas Arthur, R.A.
Lieutenant Gerald Graham, R.E.
Corporal John Ross, R.E.
Corporal William Lendrim, R.E.
Sapper John Perie, R.E.
Colonel The Hon. Henry Hugh Manvers Percy, Grenadier Guards.
Brevet Major Sir Charles Russell, Bart., Grenadier Guards.
Sergeant Alfred Ablett, Grenadier Guards.
Private Anthony Palmer, Grenadier Guards.
Major Gerald Littlehales Goodlake, Coldstream Guards.
Brevet Major John Augustus Conolly, Coldstream Guards, late 49th Foot.
Private George Strong, Coldstream Guards.
Brevet Major Robert James Lindsay, Scots Fusilier Guards.
Sergeant James M'Kechnie, Scots Fusilier Guards.
Private William Reynolds, Scots Fusilier Guards.
Private Thomas Grady, 4th Foot.
Lieutenant William Hope, 7th Royal Fusiliers.
Assistant Surgeon Thomas Egerton Hale, M.D., 7th Royal Fusiliers.
Private Matthew Hughes, 7th Royal Fusiliers.
Private William Norman, 7th Royal Fusiliers.
Ensign Andrew Moynihan, 8th Foot.
Private Samuel Evans, 19th Foot.
Private John Lyons, 19th Foot.
Lieutenant Luke O'Connor, 23rd Royal Welsh Fusiliers.
Corporal Robert Shields, 23rd Royal Welsh Fusiliers.
Private William Coffey, 34th Foot.
Private John J. Sim, 34th Foot.
Sergeant William McWheeney, 44th Foot.
Sergeant George Walters, 49th Foot.
Corporal James Owens, 49th Foot.
Brevet Major Charles Lumley, 97th Foot.
Sergeant John Coleman, 97th Foot.
Major The Hon. Henry Hugh Clifford, The Rifle Brigade.
Private Francis Wheatley, The Rifle Brigade.
Captain William James Montgomery Cuninghame, The Rifle Brigade.
Lieutenant John Simpson Knox, The Rifle Brigade, late Scots Fusilier Guards.
Private Roderick McGregor, The Rifle Brigade.
Private Robert Humpston, The Rifle Brigade.
Private Joseph Bradshaw, The Rifle Brigade.
Brevet Major Claude Thomas Bouchier, The Rifle Brigade.

CONDITIONS IN ENEMY-OCCUPIED COUNTRIES

By COMMANDER D. S. E. THOMPSON, R.N.

On Wednesday, 26th November, 1941.

ADMIRAL OF THE FLEET LORD CHATFIELD, P.C., G.C.B., O.M., K.C.M.G., C.V.O., in the Chair.

THE CHAIRMAN, on introducing the Lecturer, said: Commander Thompson has very considerable authority for telling us what he is going to say, for he has spent a great deal of time in studying the conditions he will describe. For ten years he has been a lecturer for the Navy League, and he took an active part in the re-armament campaign under their ægis. He also lectured and made many speeches for other organizations in various parts of the country. He has been continuing his propaganda work during the War in many fields, during which he has made extensive tours in the industrial areas of these islands. I am sure, therefore, that we shall listen to him with great interest.

LECTURE

IN describing conditions in enemy and enemy-occupied countries, we must bear in mind two facts: firstly, the picture is of necessity a little out of date since all news except those items approved by the Axis authorities has to percolate through a variety of tortuous channels; secondly, because it is virtually impossible to secure confirmation of detail, we must content ourselves with a broad outline, using only an occasional illustration of a particular point. Every effort will be made to avoid using any material concerning the authenticity of which there is the slightest doubt, and the framework of my picture will be compiled mainly from Axis leaders' speeches and proclamations, sentences on convicted prisoners and hostages, and captured documents. From these I shall quote freely.

To appreciate the full significance of conditions in the occupied countries, we must first consider what have been the aims of German policy since 1933. Hitler himself admits that he was much influenced as a young man by Georg Schoenerer's Pan-Germanism. Schoenerer, at the end of the last Century, was a member of the Austrian Chamber of Deputies (coming, incidentally, from one of the Sudeten districts) and the somewhat despised prophet of a Pan-German union which should embrace all the German communities of Central and South Eastern Europe and should dominate all the other races of the area. He seems to have been a disciple of Gobineau's ideas of the supremacy of the so-called Aryan race, and he was undoubtedly influenced by the fact that Austria in the late XIXth Century showed signs of more liberal tendencies in dealing with national minorities. Hitler absorbed

Schoenerer's ideas, and he also became infected with the dream of German world-supremacy. The pursuit of this dream would inevitably lead to a clash with France and Britain, and therefore war would have to be accepted as the ultimate weapon. But we must face the fact that precisely this dream of world-domination has long been the ultimate and thinly disguised goal of the Nazi state ; war has been recognized as an instrument of policy ; and it has been a cardinal point in the Nazi creed that the State must be able to face a long war, with the inevitable accompaniment of blockade. Both the human and the material elements must be made ready, and, since the human takes longer to prepare than the material, Germany began her preparations in the field of education.

German education during the last ten years has deliberately sought to brutalize the child :—

> " The children of to-day are the fighters of to-morrow. Their hardening and preparation is a task as important as that of the armaments industry."
>
> *Schul-Rundfunk* (*Nazi Educational Journal*), January, 1940.

Education must also instil unquestioning obedience. Youth Leader Ruth Stender, speaking of the training of the youngest age-group of girls, said in 1937 :—

> " They cannot explain the meaning of National Socialism. And toward them you have but one duty ; to develop . . . . a completely unconditional devotion to the Führer . . . . The Führer needs people who will say to him, ' Führer, command, we obey ! ' "
>
> *Essener National Zeitung*, 13th December, 1937.

That the effect of this was to deprive the German masses of sufficient knowledge to think independently was immaterial :—

> " The German young of the future must be as hard as steel from the factories of Krupp. The development of mental capacity is only of secondary importance."
>
> *Hitler, at the Nuremberg Rally*, September, 1935.

Their function was primarily to breed and to fight :—

> " All Germans have a double duty to fulfill—to be fathers and to be soldiers . . . . Fatherhood and soldiering belong together as the strongest sources of power of a nation."
>
> *Das Schwarze Korps*, 24th April, 1941.

While the young were being trained in this way, the older generation were occupied during the pre-war era in building up industry, especially the armaments industry. Immense stocks were secured of commodities produced outside Europe ; the manufacture of oil from coal was begun

on a large scale; scientists were set to work to discover substitutes for such things as wool and rubber. Above all, Germany looked round for supplies of labour to replace the older men while leaving the young Germans free to concentrate on their appointed calling as fighters. To provide these she marked down her neighbours, the Czechs and Poles. The former she desired for their technical ability, and the latter because they could supply the vast mass of workers which she required. Then, when her material preparations were complete, Germany struck her first blow, before an unbelieving world realized that nothing less than world-conquest was envisaged. It is essential that we should open our eyes to the true significance of the teaching implanted in German youth and the effect it produces. The insidious nature of this teaching is revealed in the following verse from a marching song included in "Sing Kamerad," a school song book comparable to our own "Scottish Students' Song Book":—

"Though the whole world lie ruined around us after the day of war
What the devil do we care—we don't care a hoot any more.
We will go marching forward, though everything fall away,
For the world will be ours to-morrow, as Germany is to-day."

The 1938 crisis, which ended with the Munich agreement, tested the ground, while the subsequent absorption of Bohemia secured minerals and a very well developed armaments industry, together with the necessary workers and a considerable quantity of modern war material. The rest of the world metaphorically shook itself; but to all appearances there was no positive reaction against Nazi methods in sufficient strength to deter Hitler and his advisers from their path.

Meantime, the German people as a whole responded well to the Nazi cult of race supremacy. Statements which appeared to other peoples as fit only for the music-hall stage were taken seriously in Germany. For example:—

> "We can advance the assertion at the base of all racial science: there is no concept of 'human being' ('man') in contradistinction to animals separated by any physical or mental trait; the only existing differentiation is between Nordic man, on the one hand, and animals as a whole, including all non-Nordic human beings, or sub-men, who are transitional forms of development . . . . Only the Nordic race utters really articulate sounds, and it is not proved that non-Nordics cannot reproduce themselves with chimpanzees."

Prof. Hermann Gauch, "New Elements of Racial Instruction," pub. Klein, Leipzig, 1933.

In fact, as *Mr. Punch* paraphrased it at the time :

" The Nordic race is man.
The rest, from Celt to Chink,
Black, yellow, white or tan,
Compose the Missing Link."

Nor did matters stop here, for Nazi Germany takes these things intensely seriously, and the future has been planned to the last detail. Outstanding were the steps taken to increase the numbers of the German people, so that they would be able to secure absolute domination. To this end, special steps were taken to encourage early marriage and a high birth rate ; and, proceeding to extremes, we get such teaching as that of Professor Ernst Bergmann of Leipzig, on " Knowledge and the Spirit of Motherhood " :—

> " Life-long monogamy is perverse and would prove harmful to our race. Were this institution ever really enforced—and fortunately this is almost never the case in reality—the race must decay. Every reasonably constructed State will have to regard a woman who has not given birth as dishonoured. There are plenty of willing and qualified youths ready to unite with the girls and women on hand. Fortunately, one boy of good race suffices for twenty girls. And the girls for their part would gladly fulfil the demand for children were it not for the nonsensical so-called civilized idea of the monogamous permanent marriage, an idea in complete contradiction to all natural facts."

Admittedly this type of teaching came from the more fanatical element ; but it met with no official rebuke, and inevitably it led to strained relations between various religious confessions and the Nazi regime. Once the gulf had opened it deepened rapidly until we get such pronouncements as the following from Kerrl—Nazi Minister for Church Affairs :—

> " The context of Christ's teaching must be altered. There has now arisen a new authority on what Christ and Christianity really are. This new authority is Adolf Hitler."

The stories of the persecution of the Roman Catholic Church, and of the imprisonment of Pastor Niemöller and other Protestants are too well-known to need elaboration : there must be no rival to Hitler !

By the summer of 1939 Germany was ready to take the next step forward and secure the further labour needed to face an eventual British blockade. All her information was to the effect that Britain was not ready to fight and that the state of French internal affairs was such that France could largely be discounted. The attack on Poland was therefore made.

From the military standpoint the Polish campaign was an unqualified success, but Hitler had made a miscalculation: Britain declared war, and a few hours later France followed suit. Even more surprising, they persisted in continuing the war after the Polish campaign had ended. The major war was on, before Germany had had time to organize conquered Poland or secure her labour reserves from that source. Even so, in the first year of the war Denmark, Norway, Holland, Belgium and France fell in quick succession. During the pause that followed the Danube States, impressed by German might, hastened to her embracing arms. Next Greece and Yugoslavia were overrun; and so the stage is set to examine the application of German theories to occupied—if not conquered—Europe.

Before taking the occupied countries individually, we should note their division into two general types—the peoples of so-called Germanic origin and the rest. Norway, Holland, Denmark and parts of Belgium and France come under the first heading; Poland, Bohemia and Yugoslavia under the second. The eventual status of Greece and France has not yet emerged, nor has the final position of satellite states like Hungary, Rumania, Finland and Bulgaria. It seems probable that Italy will have to be content with such charity as a poor relation is entitled to expect. Certainly, she will have no rights.

The Germanic group are encouraged to throw in their lot with Germany, and—excepting in Denmark—such education as is still available is directed to this end. "The whole function of all education is to create a Nazi," said Bernhard Rust, Reich Minister of Education, in the *Völkischer Beobachter*, 13th February, 1938. Thus in Norway the Quisling regime has instituted a political surveillance in the schools and has begun to raise a Norwegian regiment to fight for Germany. In Holland, a Dutch Nazi has been appointed Secretary-General of the Ministry of Education, and the teaching of German is being greatly extended, while Mussert is organizing a group of young Dutch Nazi toughs under the guise of a youth movement.

Coupled with the educational spur there is also direct appeal. Take, for example, the following extract from an article in *Das Reich*, 27th October, 1940:—

> "We place our hopes in the young people of Scandinavia and of Holland . . . . they will hear the call for their help in laying the foundation stone for the future of the great German Reich; they are longing for the day when they may honourably serve under the Swastika, with weapons in their hands . . . . Everywhere one person must be in command, and the others must be proud to be able to obey."

The net is spread yet further by what the Germans probably assume to be a tempting offer. Those of Germanic race may secure German citizenship, without relinquishing their own, by agreeing to serve for two years in the German forces. Further, if they agree to serve for four years, they will be granted in addition a small farm or agricultural holding with sufficient capital and equipment to enable them to marry and earn a living. Presumably such a holding would not be in their own country!

In contradistinction to this patronizing toleration of the Germanic peoples, the non-Germanics are doomed to slavery and in certain cases to eventual extinction. Hitler in *Mein Kampf* (p. 166 of the German edition) says :—" In the struggle for existence these people are defeated, i.e., they are subject to enslavement, and thereby sooner or later to extinction."

Again, Gauleiter Greiser, speaking at Poznan last February, said :—

" Victory will only be achieved when the last farm is occupied by German farmers."

Hitler is deliberately exterminating the leaders of the conquered countries so that he may readily exploit the workers and then exterminate them when he has bred enough Germans to take their place. The process of extermination has already been begun by the forced separation of young men and women so that a new generation cannot arise. Men are rounded up by press-gangs and forcibly transported to the Reich, and trains have even been stopped and all able-bodied men carted off to slave in German factories. Should any of these unfortunates attempt to escape from Germany, they are most severely punished ; for example :—

" A special court at Dortmund has sentenced a Pole to death for secretly leaving his job in Germany and trying to escape from prison after arrest."

Essener Allgemeiner Zeitung, 16th January, 1941.

Even women are not exempt :—

" Three women farm workers were given sentences varying from 18 months to 2 years imprisonment because they hit back when a German beat them."

Westfälische Landeszeitung Rote Erde, Dortmund, 25th April, 1941.

The Nazi regime does not envisage any appreciable amelioration of their lot at the termination of the war. The *Deutsche Allgemeine Zeitung* of 16th February, 1941, says :—

" The programme drawn up for a long time to come provides for foreign labour for years ahead."

Present information is that three million foreign workers have been taken to work in Germany. Of these about one-half are prisoners of war.

But there are certain points common to all the countries—Germanic or non-Germanic, absorbed, occupied or nominally allied—which have fallen under the Nazi scourge. One of the first things Germany does in overrun territory is to secure all the food stocks she can find. This takes precedence even of the rounding up of firearms and other weapons in the possession of the people. Ralph Kent, of the American College, Athens, reports of the occupation of Greece :—

> " They even went into private gardens, counted the rows of growing potatoes and other vegetables, entered them on records and informed the owners that they were commandeered. I watched the Germans deal with a large potato field in a market garden near Athens. They sent field kitchens and mobile canning apparatus to the field, dug potatoes, cooked them in commandeered olive oil, canned them on the spot, and stacked the tins on lorries ready for transport to Germany."

Stocks of industrial raw materials were treated in the same way. Mr. Lars Moen, an American who was in Antwerp when it was occupied, states that on the afternoon of the day the Germans entered lorries began to remove the entire contents of the city's warehouses to Germany.

The systematic closing down of all industry not required for German purposes is creating a very serious unemployment problem. Plant frequently is removed bodily to the Reich, and large numbers of industrial workers are taken with it. Cases are recorded of those refusing to go being debarred from unemployment relief, and in some instances food cards have been withdrawn.

A third feature of German domination which is common to all the occupied countries except Denmark is the discouragement of higher education and of purely national culture. In Poland, even the music of Chopin is rigidly suppressed. Libraries and scientific institutes have been closed, looted or taken over by the Germans. National monuments, such as the Jagello Monument in Cracow, have been destroyed. It is refinement of cruelty to force their rightful owners to work on the demolition.

The Press, too, has been reduced to conformity with German ideas, and freedom of thought has been further restricted by the ban on listening to foreign broadcasts. In Poland, this is even punishable by death :—

> " The death penalty is to be applied for the following crimes . . . . not surrendering wireless receivers, listening to enemy broadcasts, producing or distributing secret printed matter. . ."
>
> *Litzmannstädterzeitung*, 27th November, 1940, quoting Dr. Neubauer.

This, again, does not apply in Denmark, but the special conditions in that country will be considered later.

Finally, all the occupied countries are bound hand and foot to Germany in economic matters. Details vary from country to country, but the two principal weapons are the same. By the skilful manipulation of clearing accounts Germany has established in each country a huge debt which can only be redeemed if she is victorious. Further, by plundering all available supplies of consumer goods, and at the same time ensuring that currency—frequently with no backing other than German paper—is circulating freely, she has induced in each of her victims a considerable and increasing measure of inflation.

Apart from these broad lines, conditions differ slightly in the individual countries. Economically, the highly industrialized suffer more than the agricultural, and the Slavonic peoples—Poles, Czechs and Yugoslavs—more than the other races.

In a brief survey it is impossible to devote much attention to any one country: but, before glancing at the outstanding features of the different occupied territories, we will quickly review the salient points of conditions in Germany's satellite states.

ITALY

There is little enthusiasm for the war amongst Italians, and reports of clashes between them and Germans are frequent. Italy is very short of both war material and food supplies and must depend increasingly on her Axis partner. Germans are openly contemptuous of that partner, who is accorded some semblance of consideration only because Germany depends to a large extent on the potential value of the Italian fleet and because Italy supplies an appreciable quota of Germany's labour requirements. Italian troops are also useful to garrison occupied territory and so release Germans for active service. At the same time German forces hold strategic points throughout Italy to enforce compliance with the wishes of the senior Axis partner, if necessary.

FINLAND

Although, with German aid, the Finns have advanced in Karelia, they have landed themselves with an Old Man of the Sea and cannot get the burden off their backs. It seems that a large section of the people would like to make peace now that they have regained the territory lost in 1939; but Germany has too strong a hold, particularly on their rulers. The Russians have carried out a scorched earth policy as they have retreated, and there have therefore been no additional supplies available to compensate for the demands made by their German allies. In consequence, the country as a whole is suffering badly from a shortage of food and of fuel for industry.

HUNGARY

The Hungarians are in a somewhat similar position to the Finns. Their country has virtually escaped all border operations, since Yugoslavia was the only frontier where fighting took place. But, since the commencement of the Russian campaign, their troops have been involved in heavy fighting and have suffered severe losses. Within the country unrest is steadily increasing while, without, the émigré Hungarians are endeavouring to form a nucleus for a Free Hungarian movement.

BULGARIA

The Bulgarians played a part, though a passive one, in the Greek campaign. They are likely to be called upon to pay for their share of the spoils by being forced to provide labour for Axis war production ; and they are undoubtedly being pressed, diplomatically and economically, to send troops to help on the Russian front. The country is involved in the general shortage of food and other commodities common to all territories within the German economic bloc.

RUMANIA

The Rumanian people are far from being united in support of the Axis ; but having become so largely involved in the Russian campaign they cannot withdraw. So they find themselves driven into the same predicament as Finland.

DENMARK

Turning to those countries actually overrun after offering resistance, we come first to the " Germanic " section and the exceptional case of Denmark. Here, the Nazis hoped to bend the King and Government to their will and organize a puppet state which should be a model of how easily the New Order could be fitted over the old. Unfortunately for Nazi hopes, the King of Denmark and his Government have shown themselves determined to yield no point to the invader without a fight.

Germany works principally through the agency of the Danish Fascist leader, Clausen, and his small but very vocal party. Up to last June they had made little headway, but in that month a disturbance at a Danish/Austrian football match opened the way for the handing over of power at the Ministry of Justice to one of Clausen's henchmen, Jacobsen, known as the Himmler of Denmark. This will probably mean many other changes. At the end of the summer, however, Denmark still enjoyed a measure of freedom in the Press, which was muzzled but not yet entirely enslaved ; and education still continued on the old lines. Economically, the country is tied hand and foot to Germany. In the German plan, Denmark is destined to revert to agriculture, supplying food and labour. Food conditions are probably much better here than

in the other occupied territories, but general economic conditions show no improvement, and lack of fodder and fertilizers must very shortly reduce agriculture to a desperate plight. There were reports in the Danish Press last Spring that in some districts the cattle were unable to stand because of weakness owing to lack of food. Germany is draining the country of everything that is of value to her, regardless of the interests of the Danes or of her own long-term interests. Small wonder that Danish Press reports of court cases show an increasing tale of anti-German activities and an ever-rising tide of hatred and resistance.

NORWAY

German dealings with the Norwegians differ considerably from their methods elsewhere. Probably they plan to leave Norway after the War a considerable measure of independence, relying on a close economic tie-up to provide the necessary control. Norway has water-power and bauxite for German industry, and she is intended as the main source of hydro-electric power for the whole of Germany. Further, Germany plans to turn the Norwegian seafaring instinct to good account, for only a small proportion of the German population is sea-minded, and she has always had fewer trained seamen than ships for them to man. These plans necessitate winning over the Norwegian people, and possession of the person of the King would have been a trump card. Lacking this, Germany has tried to stir opposition to the Royal House as being deserters, and has staged an elaborate farce of a Norwegian Government, first under Quisling, now under Terboven. This is rapidly breaking down on the rock of Norwegian loyalty to the King and resistance to the invader, strengthened by German economic plunder. Ninety-five per cent. of Norwegian fish catches are requisitioned by the fish-oil factories for oil to slake the Axis thirst for that commodity. The Russian campaign has brought increased troop movements through Norway to the Finnish front. The approach of winter has been heralded by the requisitioning of blankets to provide warmth for the German soldiers and sheets for camouflage in the winter snows. Food stocks have also been seized for the German army, and from Bergen come reports of crows, lichen moss and elm-bark bread being used to eke out dwindling supplies.

For once Germany appears to have assessed a conquered people correctly. *Das Reich*, 27th October, 1940, said :—

> "They are people of our own kind, persevering, stubborn, decent, bitter enemies and faithful friends. They must be won over, and will weigh heavily on our side when they have been won over."

In fact, loyal to their principles, they remain faithful friends of Britain in spite of hardships. Germany will find them bitter enemies indeed.

THE NETHERLANDS

As the Germans planned to include Holland within the boundaries of an enormously extended Germany, every effort has been made to Nazify the Dutch who were to become an integral part of the *Herrenvolk*. Unfortunately for the Nazis, the Dutch as a whole are not interested, and their opposition to Hitler and all his works increases rather than diminishes. Each successive act of repression makes their resistance more stubborn, and some regulations are openly defied. Listening to foreign broadcasts is a case in point. News broadcast from London by Radio Orange, which they accept as reliable, is discussed openly, while their own German-controlled stations are ridiculed and distrusted. Papers also complain of falling circulation, for the Dutch no longer read them " as they only print lies " (*Agrarisch Nieuwsblad*, 3rd September, 1941).

Holland, however, possesses the most powerful and numerous Quisling party of any occupied country. The business community has always been very closely linked with Germany, both by commercial ties and through intermarriage. There was a National Socialist party of relatively considerable dimensions before the War. The present constitutional position also has its bearing: an evacuated Government functioning from London is quite outside anything contemplated by the constitution of the Netherlands, and the point has been exploited to the full by Mussert and his Nazis who have succeeded in obtaining control of administration through the posts of Secretary-General (our Permanent Under-Secretary) of the various Ministries and through the replacement of provincial Governors and local authorities. Non-co-operation does not go as far as in Belgium, but the Dutch Nazis get nothing but cold hostility from the vast majority of their fellow-countrymen who are quite aware that these upstarts are merely German mouthpieces.

Holland has no raw materials for heavy industry and she is therefore designed to be, like Denmark, a source of food and labour, with her ports and shipping under German control. In conjunction with the usual clearing agreement, Germany has been buying Dutch industrial shares and has also got her claws into the banking system. Latest reports suggest that this control of commerce is being steadily extended. The food situation is bad: " diet " allows meat once a week only, and fats are very scarce; and German plunder appears, as in Norway, to have extended to clothes and blankets.

Yet the Dutch are optimistic. The German soldier is either ignored or accorded a sort of pitying contempt which is quite beyond his comprehension. The psychological effect of this on German morale is

considerable, and there have been cases of suicide among troops stationed in Holland. The fact that this attitude on the part of the Dutch goads the Germans to more savage repression is immaterial. The people of the Netherlands believe that Germany must collapse and that deliverance may not be long delayed. In spite of this optimism they recognize that this winter will be very severe ; for the harder pressed the Germans become, the more they will requisition, and the more brutally they will treat those temporarily in their power. On the other hand, the Dutch people know that, with the exception of the small minority led by Mussert, they are an absolutely united nation, and this knowledge fosters their confidence in the future.

BELGIUM

In Belgium it has not been possible for the Nazis to follow their favourite practice of installing a Quisling Government. The King remains in the country and, though he regards himself as a prisoner and steadfastly refuses co-operation, his very presence hampers the Germans. The local authorities and civil service follow his lead, and Germany's only course in the circumstances is military government. She is disposing of the non-co-operators by arrest and dismissal, but the Belgian people as a whole is not prepared to accept those who are appointed to replace them. Full reports have just reached London of the arrest of M. van Meulenbroek, the Burgomaster of Brussels, a worthy successor of M. Max. Belgian industry always had close ties with Germany and these are being developed. Purchase of shares strengthens the hold given by the one-way traffic of exports to Germany. Raw materials are provided for such industries as can be of use to the Nazis. Coal mining is exploited to the full, but wages are so low and food so scarce that there have been mineworkers' strikes which have forced an improvement.

For the future, German policy sees a Flemish Belgium incorporated with the present Netherlands and North-east France in a Teutonic state stretching from East Prussia to the Channel. The French-speaking Belgians would be pushed South to join a truncated and agrarian France. Every effort is being made to drive a wedge between the Flemings and the Walloons, politically, economically and in education. Flemish is the favoured language and is being forced on the French-speaking schools and universities. Recently only Flemings could be found with the necessary qualifications for school inspectors.

Meantime the Belgians exist, half-starved and exploited for the second time in twenty-five years. Food conditions are probably worse here than in any other occupied country except Poland. A private and reliable report speaks of children in Brussels living on potato peelings

and other refuse. Yet resistance goes on—sabotage here, an underground paper there, a secret radio or printing press in another corner; and the Belgian looks forward in faith and hope to eventual triumph.

FRANCE

In some ways it is more difficult to assess the state of affairs in France than in any of the other occupied territories. This is partly because the country is divided into two zones, one of which is governed by proxy and one directly; and partly because the French have not yet recovered from the shattering blow they received. They are emerging slowly from their state of mental torpor, but we must remember that, under the guise of Franco-German co-operation, drugs are being administered in the name of medicine. The drug chiefly employed in France is news. The French are given a surfeit of news—world, national, international, local, governmental, social, colonial—good, bad and indifferent. On the face of it, there is nothing dangerous in this; but the jumbled mass of news is so presented that the man in the street cannot possibly follow what is happening and becomes simply bewildered and giddy. The Press is controlled to the last degree, even the size of type and position on the page being prescribed in many cases.

Drugs, however, eventually kill their victim or cease to affect him. Their influence on France is beginning to wear off, and a definite reaction to the tragedy of the last eighteen months is appearing. For the moment it consists primarily of growing horror, as full realization dawns. As is only to be expected, the younger generation is recovering first, and they show signs of definite rebellion against the Axis and against their own treacherous Vichy Government. Early this summer, for instance, Darlan had to take refuge inside a restaurant when the people of Beauvais recognized him. Doubtless this antagonism has increased since then.

In the French Empire, the situation is clearer than that in metropolitan France since obviously German control is less complete and the influence of the French collapse was felt less. The adherence of French Equatorial Africa, the Cameroons and the Chad to General de Gaulle; the surrender of Indo-China to Japan; the ability of Britain to establish herself in Syria; and above all her defiance of Germany and her ever-strengthening power are having their effect. The almost daily appearances of the R.A.F. over France and the steadily growing shortage of consumer goods also affect the situation, and latest information indicates that over 75 per cent. of the people might rally to the Free French banner if opportunity arose.

Slowly but surely the spirit of France is shaking off the cloak of materialism, and then we may expect to see a new France, anxious to

stand at our side and assist in the overthrow of the modern tyrant. The first stages of her resurrection must come from within. Later we can help from without, but all the indications are that it would be folly to force the pace.

LUXEMBOURG

Luxembourg has simply been taken over complete and is administered as a German Gau. It is unnecessary to say that Germany has ignored her assurances given on the outbreak of war. German is now the only language allowed and many prominent citizens who might have proved difficult have been arrested and transported to the Reich, their families being unaware of their fate. The Duchy is, in fact, completely under the jackboot.

GREECE

Alone of the occupied countries, Greece fought a long war before she was wholly overrun by the Nazi locusts. "Locusts" is what the Greeks aptly termed the German troops, for they stripped bare every field and barn, every shop and warehouse. But this spoliation, coming on top of the long campaign against the Italians, during which Greek agriculture was perforce neglected, had resulted quite early in the summer in almost famine conditions. As little can have been sown and harvested since the campaign ended, the plight of the Greeks must be desperate indeed now winter is here. Whether any relief is actually reaching them is uncertain—the Turks seem to be satisfied that it is.

A Quisling Government has been installed, nominally responsible for internal administration, but it is increasingly difficult to find any men of standing to serve in it. Despite this Government's efforts and in face of intimidation by the occupying troops, Greek resistance is still alive; and reports would seem to indicate that many British soldiers are still in hiding, while bands of mixed Greek and British still operate in certain mountainous districts.

As in Yugoslavia, Germany has handed over certain areas to Italy and Bulgaria, but she retains effective control by military occupation of aerodromes and other points. Reports suggest that German and Italian forces clash frequently, and that gradually the Germans are becoming even more hated than the Italians. The eviction from hospital into the street of wounded Greek soldiers to make room for Germans will not easily be forgotten. The Bulgarians are loathed for their treachery, repeated in 1941 as in earlier years. For them, as for their German masters, treaties have little meaning. The present lot of Greece is perhaps the saddest of all the victimized countries, but her faith in ultimate victory burns with as bright a flame as any.

YUGOSLAVIA

The annexation of Yugoslavia was prepared long beforehand by a highly organized fifth column exploiting internal differences. Their activities were not checked until the revolt of 27th March, 1941. When Germany struck, the patriotic elements under the leadership of King Peter were still unprepared. Resistance was overcome in a few days, and the State was divided by Germany and her vassals. This division was designed to break up passive resistance by the creation of internal frontiers. Germany also hoped to obtain further labour supplies while avoiding the task of occupying a notoriously difficult terrain which would tie down valuable troops. That task was to be left to her satellites, Italy, Hungary and Bulgaria, together with the newly created puppet state of Croatia. Germany herself only occupied Old Serbia and Northern Slovenia.

These controlling Powers all administer their subjects differently, but all combine to dispossess the Serbs and reduce them to slavery. Education has ceased to exist except in Slovenia, where "German" schools are being extended, and in Croatia. The national Press is extinct. Both the Germans and the Bulgarians persecute and expropriate the Orthodox Church. The Germans also persecute the Catholic Church in Slovenia, where it has always been identified with Slovene nationalism. Some 300 to 400 Slovene priests have been arrested in the Maribor district alone. The monasteries have been disbanded and occupied, nuns faring little better than monks. Indignation at the treatment of one famous Ursuline convent caused serious riots. Bulgarian persecution is much milder and has been cloaked by the appointment of Bulgarians to key positions, notably the important bishopric of Nis.

Everywhere food shortage is developing, and there seems ample evidence that the Serbian peasants at least have cut down production deliberately in order not to supply their enemies. In Serbia, too, compulsory labour service for men between 17 and 25 has been ordered. But in Serbia conditions are so bad that many—both men and women—have taken to the mountains, carrying on such successful guerrilla warfare that the German garrison has recently had to be increased. German reprisals only goad them to further efforts, but Germany is sparing no savagery. Ray Brock, a *New York Times* correspondent, reports having overheard a German officer say :—

> "We'll deal with these Serbs as Nordic conquerors must deal with the vain inferiors who oppose them. They must be taught a lesson they will never forget."

Tuition consisted of promulgating a decree announcing that a hundred Serbs drawn from all social strata had been shot for wounding one

German soldier, and that this standard would be maintained. Shortly afterwards eight hundred German soldiers were said to have been killed in an explosion at Smederevo, near Belgrade (D.N.B., 11th June, 1941.) Whole villages have been burned and many peasants hanged. In one village all the males left alive after an outburst of executions were transported to forced labour in Germany.

In Italian Slovenia and in Montenegro, as in Croatia, whose independence has proved an illusion, the flame of revolt is flickering. The Serbs in those provinces have risen, and the Croats and Slovenes are gradually making common cause with them. Istanbul reported that 5,000 Serbs practically controlled Herzegovina; and that the Croat Government was asking for Italian troops to help in crushing revolt (A.F.I., 21st July, 1941).

The German attack on Russia and the Anglo-Russian alliance have stimulated resistance which seems likely to continue and even increase while Axis forces are tied down to the Eastern front.[1]

POLAND

We have considered the tragic fate of Poland to some extent when discussing Nazi treatment of "non-Germanic" peoples. This unfortunate nation, however, is singled out for especially harsh treatment:—

> "Foreigners may never again have property here, only Germans may be the possessors and masters, and Poles shall be our slaves ('Knechte')."
>
> *Gauleiter Greiser, at Wielum, Ostdeutscher Beobachter*, 7th May, 1941.

Every method of inflicting humiliation and hardship is employed. Place names are Germanized; rations are half those of the Germanic peoples; and, according to the *Litzmannstaedter Zeitung* of 10th November, 1940, the expropriation of all buildings and ground formerly belonging to Poles and Jews had to be completed that month. In the

[1] The extent to which organized resistance in Yugoslavia is developing may be judged from the following quotation from *The Spectator* of 16th January, 1942: "A significant appointment has been made by the new Prime Minister of the Yugoslav Government . . . . Its significance lies in the fact that though the Government has its headquarters in London its new Minister of War, General Draza Mihailovitch, is at the head of an army fighting the enemy in his own country. General Mihailovitch . . . . has kept together the remnants of the Yugoslav army that was scattered by the Germans last Spring, has organized them as guerrilla troops . . . . . , has engaged the enemy now here, now there, worrying them and harrying them, and has now made himself virtual master of large tracts of country. So great has his success been that his army consists of much more than widely distributed bands of guerrillas. It now constitutes an army in the field . . . ."—*Editor.*

famous textile centre of Lodz it was forbidden to sell any textile goods at all to a Pole—ration cards notwithstanding! It is little wonder that as early as last May the *Ostdeutscher Beobachter* (29th May, 1941) reported that there were 450 deaths a day in Warsaw alone from under-nourishment and privation.

No matter what vileness is perpetrated, a Pole has no redress. *Das Schwarze Korps*, 31st October, 1940, reported;—

> "A court in Germany found a German employer guilty of stealing from a Polish workman, but he was acquitted. . . . . a Pole cannot be allowed to triumph over a German."

Modern Germany has certainly brought up to date the slogan "Woe to the vanquished"; but the spirit of resistance is still very much alive in Poland, as it is elsewhere; and Nazi teachings may well recoil on their own heads. Poles, like the rest, feel that though the Germans have overrun their lands the war has still to be won; and the spectacle of Nazi industry coming to Poland for safety from R.A.F. raids is a never-ending tonic against despair. Their faith in the future is unfailing and all the Nazi intrigues have failed to produce a Polish Quisling.

CZECHO-SLOVAKIA

Bohemia is in much the same state as Poland, though actual warfare has not devastated the country. President Hacha is retained and the Czechs give him a certain qualified support, regarding him as some small brake on German activities, since there are lengths to which he will not go. Further, the Germans value Czech technical skill too highly to risk driving them to such a state of rebellion that they might even prefer death or the concentration camp to work in the factory, in spite of the fact that factory work gives them the opportunity of slowing up production or doing a little sabotage from time to time.

The levy on farm produce is conducted in a ruthless way. For example, everyone possessing more than three hens has to hand over to the Nazi authorities 60 eggs per year for each additional bird. Similarly, peasants have to hand over 3 kg. of melted fat for each pig killed that weighs 100 kg. or over.

Religion has received special attention, and priests and ministers are only allowed to use Biblical teaching where it is not contradictory to Nazi aims. Any reference to the Almighty being a higher power than state, nation or race is regarded as high treason. Priests have to present their sermons for approval before delivery and must deliver them with the alterations made by the Gestapo.

Economically the tie-up between Bohemia and Moravia and Germany is very complete, and there will be immense difficulties to surmount before they can resume separate economic life.

Slovakia, as a nominally independent state, suffers far less persecution ; but she is bound hand and foot economically, and politically she is completely dominated by the Nazis. After twenty years of federation with the Czechs, conditions in the country were much improved, but there is reason to believe that since 1938 they have reverted to a point far below that of, say, 1914.

CONCLUSION

This completes our cursory glance round the fettered nations of Europe. We have observed two things. First, Germany has them all securely fastened, though a few are still allowed to wave this limb or that freely. In fact, they are encouraged to do so, and the world's attention is drawn to this freedom. Inevitably, the mind conjures up a picture of flies caught in a web, having their legs and wings fastened down one by one, but being left alive until required, so that the spider may always have fresh meat.

The second point to observe is that all these countries retain hope and look with longing towards Britain. Britain has withstood the monster and remains confident and unflinching. Now others are rallying to her side, so that the British Commonwealth is no longer alone. The vast resources of the U.S.A., the magnificent people of Russia and re-formed units from the overrun countries all centre round Britain, the real citadel from which the evil forces of Nazidom have recoiled. But Nazidom is not yet destroyed and will attack again with redoubled fury. The Germans know full well that if they are to survive Britain must be annihilated :—

> " It now only remains to be seen what degree of actual annihilation of the British Isles is required to make the English realize the position."
>
> *Dr. Silex, Deutsche Allgemeine Zeitung,* 22nd October, 1940.

Or again :—

> " England must be destroyed and become once more that unknown green island that she was centuries ago."
>
> *Dr. Ley, " Angriff,"* 20th December, 1939.

A review of the state of affairs in Britain does not come within the scope of this lecture. Suffice it to say that the will to win is there, and the ability. The capacity for work is being developed. Will it be developed in time ? That is the question we must all ask ourselves, and we must strive with might and main to assure an affirmative answer. The *Berliner Börsenzeitung,* 16th March, 1941, wrote :—

> " For Britain the fate of Carthage is reserved."

Carthage, however, forsook the sea and paid the penalty. Britain has regained supremacy at sea and can thus give the worker a chance to get into his stride. On whether he takes the chance or not depends the result of this war and the fate of the world.

DISCUSSION

CAPTAIN G. S. K. JOHNSTON: I would like to say that people who were captured in Syria by the French in Syria, taken as prisoners of war to French war camps, and eventually released and sent back, said that, when they passed through the prisoners of war camp in Germany, they were treated in a very much better way in that camp than when they got to France. They said the conditions of the French war camps were very bad indeed.

THE CHAIRMAN: That is occupied France?

CAPTAIN JOHNSTON: Yes.

CAPTAIN E. ALTHAM, R.N.: Can the Lecturer give us any idea of how the occupied countries are re-acting to the effects of our own bombing?

THE LECTURER: Some countries welcome it because it is one of the things that give them hope. The effect of our bombing has been to force Germany to send some of her industries to the occupied countries, and the sight of them fleeing, for example to Poland, for protection from the R.A.F. quite obviously gives them great hope for the future. Not only that, but they see Germans coming from towns like Hamburg, and hear them talking about the awful effects of bombing. Again, we get constant reports of how the natives of certain countries, particularly the Dutch and French, turn out to cheer our aircraft as they fly over during daylight sweeps. That, I think, shows that in most of these countries it is realized that although we bomb their cities, it is for their own ultimate good, and they accept it as such.

THE CHAIRMAN

We are all very grateful to Commander Thompson for his very interesting lecture. It is one which lends itself to being listened to rather than to being discussed, because he has been giving us information to which he has sources of access which we have not.

It is depressing to hear of these tragedies going on in the occupied countries; but at the same time it is an inspiration because it makes us glad we are fighting for Europe, freeing Europe, and it stimulates our determination to bring the War to a proper conclusion, and to wipe out this crowd of evil-minded men completely. As the Lecturer said, the countries that are looking to us for their freedom may well have to wait a considerable time unless we have some pleasant surprises. It is very interesting to think of the psychology of Hitler's mind about Europe. If he wanted to have Europe really in the Germanic orbit, he must get it eventually to consent to being in that orbit, and that could not be done by the education of children because that would be too distant. There would be a hiatus, even if he achieved his object, before that teaching could have effect. I believe when he started to rule a few of these countries—certainly the Netherlands—he tried to induce a feeling that the Germans were going to be kind-hearted to the people and treat them with a considerable amount of generosity; but I have been told —talking to Ministers of different countries—that the attitude of the people themselves was so hostile to any acceptance of German friendship that the Germans changed their tune. In other countries, such as Yugoslavia, Greece and Poland,

there is no doubt that the Germans started at once to commit the most brutal assaults on the people, and have ever since treated them in the most callous and evil way that the human mind is capable of.

But I feel that things will somehow follow an inevitable course. This mass of human beings in occupied Europe cannot be controlled by any action other than good will or brutality. At present Hitler has tried both and has come back to brutality and force everywhere. Yet whatever he does in that way really only strengthens the opposition of those who are against him, and I think that whereas there was in Europe at one time a good deal of distaste for this country of ours—a good deal of feeling that we had everything and they had nothing and a great deal of jealousy—there is now a much stronger feeling that with all our faults we are the only nation of the great protagonists that they can turn to in the near future. I think our position is better in Europe and better in our own minds: our consciences are stronger, and we have more right to be determined that we are going to go right through with it until we completely destroy the European dragon.

The customary votes of thanks to the Lecturer and to the Chairman were carried by acclamation.

THE GERMAN NAVY AND COMMERCE DESTRUCTION

By Frank P. Bowen

THERE was no excuse for any element of surprise at the German campaign against British commerce either at the beginning of the last war or of this one, for quite apart from the fact that British shipping has been the particular aim of every enemy for centuries back, commerce destruction has been the keynote of German naval policy ever since they have had a navy and even before that when they were content to get their warships by hire.

For centuries German Princes, having no idea of sea power themselves, were content to hire fighting ships ready armed and manned from the free towns of the Hanseatic League when, in addition to the rates of hire, the lessors were promised prize money after the fashion of that day. The Hanse ships were already as much warships as merchantmen, for they did not hesitate to take or destroy any ships which they regarded as their trade rivals and they always had a strong streak of piracy. When called upon to account for their actions they always had their escape: when the ships were hired or when there was a grievance to be redressed the League was a powerful organization, but when there were accusations to be answered the ships and seamen belonged to the individual cities and no aggrieved party was ever known to have obtained redress without war against the whole League. Naturally the employment of such forces entailed disadvantages which would have been more serious had the German Princes possessed any shipping open to retaliation.

Frederick William the Great Elector, the Hohenzollern who converted the Margraviate of Brandenburg into the Kingdom of Prussia in the XVIIth Century, was the first German Prince to have any real appreciation of the value of sea power to his country. Despairing of getting his own people to take to the water, and having had an object lesson of the value of sea power in Sweden's unresisted invasion, he came to an agreement with a Dutch speculator named Raule to hire him a complete navy, designed on corsair principles, for a fixed sum and a proportion of the prize money; prize money was also the only incentive that was effective in persuading a few Germans to enlist in the fleet. He obtained naval facilities at Emden, then independent, in return for promising to protect its shipping, and when Raule's capital were expended he built a number of ships under Dutch supervision which were then hired to the speculator to be manned and hired back. In 1681 he

chartered his fleet to Spain for a fixed sum and any prize money which was to be made; Spain refused to pay the former, so the Prussian fleet attempted to reimburse itself by capturing the treasure ships from Mexico. One division had a very narrow escape from annihilation by the Spaniards off Cape St. Vincent, and when Frederick William died Prussia lost all interest in sea power, preferring to loot on land.

In the Seven Years War the Hanseatic League was again called upon to supply Prussia with warships to use against Sweden, with the promise of prize money; but by then the decline of the free towns had been so great that their naval contribution was almost useless and the King issued privateering licences to anybody who applied for them, his one desire being to injure Swedish merchant shipping as much as possible. By that time the civilized world had outgrown the idea of warfare by that piracy which had been regarded as quite normal in the Great Elector's day, and the outrages committed by these licensed pirates, many of them British, had serious results.

Immediately after the fall of Napoleon and the foundation of the Germanic Confederation in 1815, Prussia, which had a Baltic seaboard and naval facilities in Emden, tried to persuade the other States of the Confederation to shoulder the greater part of the cost of a navy which was primarily for her benefit; the incentive held out being a glowing promise of prize money. But the other principalities remained cold, and it was largely for the benefit of her naval ideas—part of a far larger scheme even in those days—that Prussia caused internal trouble in Denmark and worked it for its full value in propaganda. It was not until 1848 that this patient propaganda bore fruit; then there was an insistent popular demand for a Confederation Fleet to which the Frankfurt Parliament finally yielded.

The original plan put forward was to build fifteen 60-gun sailing frigates, with auxiliary steam if practical, five steam frigates and twenty steam corvettes for commerce destruction, and some forty-five smaller vessels. Next year it was necessary to modify this programme to eight 60 and four 40-gun frigates, six screw and six paddle sloops and small craft. To provide 9,500 officers and men for this fleet would have meant taking one-third of the personnel of the merchant service, and as these men were wanted for profitable commercial work it was decided to tempt foreign seamen, especially British, with good rates of pay and the promise of prize money.

In the first flush of enthusiasm the vote of the Frankfurt Parliament was immensely increased by public subscriptions and presents in kind; but the raising of the money voted soon caused discontent in the inland states and Prince Adalbert of Prussia, who was the moving spirit in the

scheme and who was appointed its head, soon found that even the modified programme was impossible. Warships could not be built in Germany in time and it was difficult to purchase many in foreign countries, so merchantmen were bought in Britain and elsewhere and converted as well as possible. The big wooden paddle frigate " Hansa," built on speculation in New York, was regarded as the best purchase; others included the former East Indiaman " Deutschland " of 1819, converted into a sailing frigate, the pioneer Cunard liners " Britannia " and " Acadia " and many other merchant steamers designed for coastal or North Sea work. Some were specially built abroad, but not many.

The only leader who could be found for the fleet was Karl Brommy, recently honoured by having a German warship named after him. He was a Leipzig adventurer who had acquired American citzenship, but who had at least a certain amount of naval experience fighting the Turks in the Greek service. Prussia soon saw that the Confederation Navy was not likely to be permanent or of much use, and set about establishing her own fleet alongside it. It was necessary to appoint a commission to report on the country's naval needs, but as it was impossible to find anybody but soldiers they immediately condemned the suggestion of a long distance navy, the lure of prize money having little attraction for them as they would not share in it, and would only agree to the construction of a number of gunboats to assist the land batteries and to be under their orders in coast defence work. Steam seagoing warships of any kind were definitely disapproved.

The associated States were very disappointed at the promised prizes during the 1848–50 war with Denmark and there was great difficulty in manning as well as maintaining the fleet, while the refusal of Britain to recognize the flag at sea—the Confederation having omitted to go through the usual formalities—was a bitter blow. Growing opposition led to the decision to dissolve the fleet altogether. After a few private sales had been effected the remainder came to an inglorious end under the hammer of the auctioneer, many of them being bought by British steamship companies for passenger work.

Prussia carried on with her own navy, building or acquiring ships whenever she could and never losing sight of commerce destruction either as a policy or for propaganda to the people. They wanted a deal of persuasion; Bismarck's plan for a ten-year programme of new construction, including sixteen commerce-destroying corvettes, was thrown out and the 1866 war was too short and the scenes of operations too scattered for commerce destruction. After that war Bismarck changed his mind and favoured an ironclad fleet for European aggression, but the ten-year programme which was accepted by the North German Confederation in 1868 included many commerce destroyers.

The showing made by the Prussian fleet in the war against France of 1870–1 was a great disappointment to everybody, especially those who had believed in its corsair ability. The main fleet had just left Plymouth when it was warned by a passing merchantman that war had broken out. It succeeded in slipping past the French and reaching Wilhelmshaven; after that it remained inactive behind its mine defences. The only effort to its credit was that made by the auxiliary corvette "Augusta," laid down at Bordeaux for the Confederate States as another "Alabama." Delivery was stopped by Napoleon III on the insistence of the Federals, and in 1864 she was purchased by Prussia with the very similar "Victoria" and once again the authorities flooded the country with propaganda based on the cruise of the "Alabama." She slipped past the blockading fleet off the Elbe and captured three very unimportant French ships, after which she fled to Vigo and was interned. On the other hand the fact that the French navy, in spite of being badly organized, captured eighty German merchant ships had made a very big impression.

This poor performance of the German navy led to bitter quarrels with the army, whose officers did not hesitate to express their opinion, and shortly after the war von Stosch told the Reichstag that the German navy was not intended to fight battles at sea: its ships were to defend the coast, keep the ports open against blockaders, and raid commerce. That statement was made in the explanatory introduction of the ten-year building programme of 1872, which included twenty cruisers for commerce destruction, as compared with twenty-three capital ships and coast defenders. This programme was never carried into effect, largely because the army was in control of naval affairs and was very jealous of the sea service; but during its life quite a number of rigged commerce destroyers between 2,000 and 3,900 tons were built.

The late Kaiser Wilhelm II came to the throne in 1888 with a tremendous enthusiasm for naval affairs, and in the following year he was honoured by an invitation to a British naval review at Spithead which included the new White Star Liner "Teutonic" partially equipped as an auxiliary cruiser. The Kaiser spent a long time examining her with the greatest care, and in the following year launched his own auxiliary cruiser fleet. The four biggest Hamburg American and three biggest North German Lloyd steamers were subsidized and an armament of eight 5.9, four 4.7-in., four small guns and fourteen machine guns, in addition to steam picket boats with torpedo dropping gear, was reserved for each of them. Their primary purpose was for commerce destruction, and a great point was made of their speed of 19.5 and 20 knots; but no navy had yet learned the lesson of the impossibility of keeping fast liners in coal. These ships were later reinforced by bigger

and faster vessels as they came out and the Imperial navy also kept a hold on a number of other ships suitable for transports.

The German cruiser policy in the years which immediately preceded the Kaiser's accession had been towards a type which could work with the fleet, but he favoured bigger ships capable of undertaking lone-hand cruises in war-time. After several of these had been built Germany started, in the late 'nineties, the long series of small fast protected cruisers which began with ships having a displacement of 2,618, a speed of 21 knots and a main armament of ten 4.1-in. guns and with better coal capacity than was usual in their day. After that there was a regular procession of protected cruisers, gradually getting bigger and faster but not breaking away from the root design until it had been made quite obsolete by foreign competitors. Some of these were kept in the High Seas Fleet in Home Waters, some were on foreign stations ready to raid commerce, like the "Emden," "Karlsruhe" and "Königsberg." The German Prize Code was drawn up and published in 1909, showing the attention paid to corsair work. Among the articles in this Code it is significant that hospital ships, fishing vessels and small craft not engaged in hostilities were exempt from capture, no ship was to be destroyed until the safety of all on board had been secured, the right to defensive armament was acknowledged and neutral captains and crews were not to be molested. Less than two months before the outbreak of war the Admiralty Staff issued an amending order that the crews of armed merchant ships were liable to be taken prisoner but that passengers on board were to go free. These stipulations make interesting reading in view of subsequent German actions.

Even before war broke out in August, 1914, the enemy showed their policy with regard to shipping. Some British merchant ships contrived to slip away from German ports on receipt of the Admiralty warning, but all possible hindrances were contrived and quite a number were seized. The British suggestion that the normal days of grace should be mutually granted seemed to be accepted at first, but the German authorities subsequently changed their attitude and 73 British ships were seized, 23 of them ocean-going vessels and the remainder coasters or short sea traders. Of the much-advertised and very expensive fleet of express Atlantic liners only the "Kaiser Wilhelm der Grosse" and "Kronprinz Wilhelm" were commissioned against commerce, and neither of them did much. The former had only sunk two British merchant ships when she was intercepted off Rio del Oro by the cruiser "Highflyer," and speedily destroyed. The "Kronprinz Wilhelm" received her guns at sea, but finding the coal supply too troublesome interned herself in the United States. Other liners which were in open waters were also commissioned and acted as cruisers on detached duty and with von Spee's

Eastern Fleet. The cruisers " Karlsruhe " and " Emden " sank sixteen British ships apiece, the " Leipsig " two, the " Königsberg " one, and the " Dresden " three, before they were exterminated. Of the auxiliaries, the " Kronprinz Wilhelm " sank six and the " Prinz Eitel Friedrich " one.

Although these operations, and especially those of the " Emden," caused something of a panic, their achievements were not sufficient, and by the end of 1914 submarines were being used against commerce. In that year they accounted for 2,950 tons of British shipping, nearly 750,000 tons in 1915, and double that quantity in the following year, compared with 3,325,000 tons in 1917 and 1,668,972 tons in the last year of the war. To begin with some respect was paid to humanity and neutral flags, but latterly everything within their reach was sunk.

The disguised raiders " Moewe," " Wolf " and " Seeadler "—the last-named a sailing vessel and none of them formidable—contrived to sink a very large number of British and Allied ships, and their cruises were very carefully studied by the German naval authorities between the two wars. In addition to surface and submarine commerce destruction the Germans, in flagrant contravention of the Hague Convention, engaged in extensive minelaying operations purely for the destruction of commerce, and they also carried out sabotage on a large scale in British ships loading in neutral ports.

With such precedents there was no ground for surprise when Germany started her campaign against commerce at the very outbreak of the present war. The fact that she had subscribed to the submarine protocol to the Anglo-German Naval Agreement, subsequently confirmed internationally, and given specific assurances that she would adhere to the rules of humanity in submarine warfare, should have deceived no one. Her past record of complete indifference to the pledged word and to any standards of honour, much less of the time-honoured chivalry of the sea, is quite in keeping with her present activities.

JAPAN'S AIR STRENGTH

By E. SPEYER

THE reticence of the Japanese with regard to their armed forces has become almost proverbial, and the most closely guarded of their secrets during the last few years has been their air strength. It is therefore impossible to give exact data concerning the air arm of their two Services.[1] Nevertheless, certain conclusions can be drawn from plans and statistics published some time ago in Japan, from figures relating to the trade between Japan and other nations, and from public utterances by Japanese government, military and business authorities. Certain deductions can be made from these factors which, though they may err to some extent, will help to avoid the most dangerous mistake possible in war—to under-estimate the strength of the enemy.

The history of the Japanese air forces dates back to 1911, when two army officers, after having received their training in France, went home as the first Japanese airmen. During the war of 1914–18 a Japanese air mission visited the Italian front (in 1918). In 1919, an aviation section was created in the Army Department, and the first aviation school was established near Tokyo in 1920. Two more were opened in 1922. Already, in February, 1919, sixty French aviators had arrived, led by Colonel Fauré, who became the first real teachers of the Army air force. In 1927, again, a section of army flight officers received special training from a French aviation expert. In June, 1925, the Army Aviation Corps was made an independent part of the Army and placed on an equal footing with the infantry, cavalry and artillery.

Naval aviation, too, had an early start. In 1912 Japanese naval officers went through a training in France and the United States. The Naval Air Service was founded in 1920. In 1921 it was thoroughly reorganized by a British mission under Captain Senville. Following the example of the Army, the Navy created an aviation department in April, 1927. In April, 1928, a squadron of aircraft tenders was organized as a unit of the standing fleet, consisting of the "Akagi," "Hosho" and two destroyers. A naval training institute was opened at Yokosuka in May, 1931.

In 1938 the status of the military wing was raised by the appointmant of an Inspector-General of Military Aviation, and in the same year

[1] The Japanese have no independent air service; the army and navy have an air force of their own.

both the Army and the Navy started a very ambitious expansion programme. The following figures will give an idea of the strength of the Japanese air force in that year. To be on the safe side they should be regarded as referring to early 1938; they are the latest figures whlch have so far been published[2]:—

Army Air Force Squadrons—

36 Observation	297	aeroplanes
35 Fighter	350	,,
15 Bomber	150	,,
Total first line	797	,,
Second line all types	850	,,
Total	1,647	

Naval Air Force—

Patrol flying boats	600
Carrier-borne aircraft	400
First line	1,000
Second line naval aircraft, including obsolescent types ...	1,000
Total	2,000

According to 1938 statistics, the aviation personnel (pilots only) consisted of 2,500 Army Air Force and 2,000 Naval Air Force pilots.

Private estimates of the present strength of the Japanese air forces published in the United States shortly after the outbreak of the Far Eastern War gave a figure for first-line aircraft of 3,000 to 5,000; it seems likely that even the higher of the two figures is much too low. The Japanese possessed a very important aircraft industry even in 1933. During that year 2,140 aeroplanes and 3,900 engines were produced. A 1936 Japanese publication estimated that the annual capacity was 3,060 aircraft and 6,850 engines. Part of the production in the years before the War was for civilian purposes and for export; on the other hand, aircraft and components were also imported—from the United States (up to the second half of 1938, when the "moral embargo" came into force), Germany and Italy. We may therefore, for simplicity's sake, neglect production for civilian use and export as well as import, and

[2] A summary of Japanese aircraft carriers will be found in Navy Notes of the Journal for November, 1941, p. 819; this omitted mention of the existence of five seaplane tender ships.—EDITOR.

also what was produced before 1933. We then arrive at the following estimate of production figures (aeroplanes alone) :—

1933	2,140
1934	2,445
1935	2,750
1936	3,060
1937	3,365

That is, a total production of 13,760 for military purposes up to the beginning of 1938. If we regard 60 per cent. of this figure as non-operational aircraft and allow for 15 per cent. loss through accidents, etc., there would still remain about 4,700 operational aircraft, against about 3,700 in the statistics given earlier in this article, which might indicate a hidden reserve of about 1,000 aeroplanes.

For the production after 1936 we have only one clue : in September, 1941, a high authority of the Press Bureau of the War Ministry in Tokyo declared that the output of aircraft was ten times that of four years previously. Even allowing for gross exaggeration, and taking the truth to be about 50 per cent., the output during 1941 would have been in the neighbourhood of 15,000 aeroplanes. The following production figures, therefore, although hypothetic, can be regarded as conservative estimates :—

1938	4,000
1939	6,000
1940	10,000
1941	15,000

That is a total production since 1938 of 35,000 aircraft.

Allowing 50 per cent. for non-operational aircraft (17,500) and 1,000 aeroplanes as lost in the China war ; disregarding the 1938 production on the improbable basis of being entirely obsolete ; deducting a further 15 per cent. for accidental losses ; there would still remain about 12,300 operational aeroplanes from the production years 1939–1941. If, again, we disregard the 1939 production as not up to modern standard, we arrive at a figure of about 10,000 aeroplanes from the production years 1940 and 1941.

Opinions differ as to how many of these are first-line and how many second-line, especially as the meaning of these expressions is by no means clear. Some regard as first-line those aeroplanes involved in or ready for actual fighting only, regardless of the year of construction, while all aeroplanes held in reserve are second-line. Some regard as first-line only those aircraft which were produced during the previous year. If the latter view is accepted, the first-line strength of the Japanese air forces would be approximately 6,000.

Whether an aeroplane is obsolescent or obsolete depends, apart from technical viewpoints, upon the opposition it might encounter. An aeroplane which can still be used, or could until recently be used, in China might be entirely useless against British, Dutch or American air opposition.

The present maximum capacity of the Japanese aircraft industry is probably around 20,000 aircraft a year.

It is still too early to know whether the Japanese air forces use any aeroplanes of unknown or recent construction. From what was known before the outbreak of hostilities, the Japanese aeroplanes seem to be slower than the later models of the European Powers and the United States. The shore-based fighters of the Navy and the Army fighters are single-engined low-wing monoplanes, with maximum speeds varying from 270 to 300 m.p.h. at 15,000 feet. The majority of these are equipped with four guns, in some cases with two cannons and two machine-guns. Probably a number of older fighter types are still in use with maximum speeds of 250 to 260 m.p.h., carrying only two machine guns; there may also still be in service old biplanes with about 200 m.p.h. speed.

The best known of the heavy bombers are the naval Mitsubishi T.96 and the Army Mitsubishi T.97. (Japanese aircraft are designated according to the year when they were originally designed; these types have of course meanwhile generally been improved. T.97 in the above connection means that the aeroplane was designed in the Japanese year 2597, *i.e.*, 1937.) These are twin-engined machines, the former a mid-wing monoplane showing Junkers influence in design. Both carry about 2,000 lbs. with a range of about 1,100 miles.

The light bombers and reconnaissance planes are chiefly single-engined low-wing monoplanes with maximum speeds of 250 to 260 m.p.h. and maximum bomb loads between 800 and 1,000 lbs.

The two main types of reconnaissance float-planes are the T.95, a single-engined biplane with a single central float and two wing tip floats, and the T.97, a mid-wing monoplane with a twin float. This aircraft is often used as a fighter.

The most commonly used flying boats are the three-engined T.96 Mitsubishi and the four-engined Kawanishi T.97.

As can be seen from the designations, all aircraft mentioned here were originally constructed in or before 1937. It seems almost certain that the Japanese have—possibly under German guidance—designed and built newer and more efficient types, details of which, however, have not yet reached us.

Japan has devoted much energy to the training of her aircraft personnel. Some details have already been given in the historical review at the beginning of this article. In 1930 the system of youthful airmen was adopted, and candidates selected from boys between 15 and 17. Japanese aviation personnel has shown a high morale and extreme courage. Reports circulating some time ago that their aiming was poor have not been proved by recent experience ; it is of course quite possible that it has been improved of late by German instructors.

In 1938 eight military aviation and aero-technical schools were in existence. In addition, there are at least two naval training centres.

The Japanese Aircraft Industry

Japan imported her first aeroplanes in 1917, when the Army bought machines from Europe ; since then Japan has always continued importing planes. At the same time efforts were made to produce them at home, in State and private factories. Although the Japanese have shown little originality and creative power, they have succeeded in building up an industry of high efficiency and a standard far superior to their automobile industry. Japanese aeroplanes have, especially in more recent years, shown good performances even when measured by European and American standards.

While in earlier years Japanese constructors were mainly influenced by British (Sopwith) and French models, in the years after 1933 Germany became their source of inspiration. The Mitsubishi T.96, for instance, was developed from the German Junkers 86. The Mitsubishi T.96 is still in use as a naval and coastal defence bomber and has proved successful as such.

Afterwards, the influence of American constructors became preponderant. Quite a number of American machines were bought for commercial and military use. Regardless as to where the aeroplanes came from, the Japanese learned from all of them, and sometimes developed them in a direction quite different from the original with regard to range, load, speed, etc. Generally, the Japanese seem to favour a lower wing loading and higher aspect ratio than either the British or the German designers. Since June, 1938, when the " moral embargo " against Japan came into force in the United States, the export of planes and aircraft parts from there to Japan dried up. Imports from the United States of aircraft and parts amounted, in thousands of dollars, to 989 in 1936 ; 2,484 in 1937 ; 11,062 in 1938 ; 2,574 in 1939 ; and 2,574 in six months of 1940.

There is no doubt that Japan has profited from the experiences of the Second World War. She has also obtained aircraft both from

Germany and Italy. More important were probably the reports of military and technical observers on the spot. Her own aircraft industry was already very well developed in 1936; imports do not seem to have played an important part with regard to numbers, and were probably more than balanced by Japanese exports; in fact, China's purchases from the United States were more important than those of Japan in the period from 1936 to 1940.

It can be assumed that by now the Japanese aircraft industry has concentrated upon the production of a few seasoned models which are being turned out on as large a scale as possible.

Most of the Japanese aircraft factories were started by the larger shipbuilding firms who, through their experiences, had, so to speak, a flying start. In 1938 the Aeroplane Manufacturing Industry Law was passed by the Diet with the object of improving quality and reducing production costs. This law gave the Government practically full control over the industry, which became subject to a licence system. An Aircraft Technical Committee was set up to standardize parts and materials. Qualified manufacturers were exempted from income and profit taxes on new undertakings, were permitted to import equipment and materials not obtainable in Japan, free of duty, and might issue debentures up to twice their paid-up capital. Fourteen companies were licensed in 1938, one in 1939.

In order to make the Japanese aircraft industry independent of foreign research and models, several research institutions have been created, *e.g.*, the Army Aeronautical Institute, the Naval Aviation Arsenal, the Aeronautic Institute of Tokyo Imperial University, and the Central Aeronautical Institute. The last-mentioned institute was established in April, 1939, to carry out an exhaustive five-year research programme at the cost of 50 million yen. It was devoting its attention to the manufacture of high speed aircraft, of large-sized passenger aircraft (troop-carrying planes?) and the increase in production of superior types of aircraft.

Japan possesses an important engine producing capacity, though details with regard to the engines built are scarce. Amongst the models were Wright, Pratt & Whitney, Rolls-Royce, Napier, Fiat, Renault and Hispano-Suiza. The Japanese Government has, during recent years, encouraged the production of engines, as well as machinery and tools, with the result that between 1936 and 1938 that production doubled in value. In comparison with home production, imports were not considerable, and only slightly larger than exports. Since 1938, production figures do not seem to have been published; it can, however,

be safely assumed that the increase of production since that time has been still larger, in accordance with the programme of the Government to become independent of imports in most respects. The talent of the Japanese for copying foreign products and producing them on a large scale, once they have grasped the technical problems, has certainly helped them to achieve the sought-for independence.

While the change from manufacturing textiles to the heavy industries was already pronounced during the first half of the previous decade, it has been accelerated during the last four or five years by the Four-Year Plan which came into force in Spring, 1939, with the purpose of obtaining self-sufficiency within the Yen-Bloc by 1942 in iron and steel, coal, light metals, zinc, soda, sulphate of ammonia, pulp, rolling stock, motor cars, shipping, and substantial increases in many other raw materials. This list does not contain aircraft, tanks, guns and ammunition ; however, with a nation like Japan, it goes without saying that the aim of the whole Plan has been to become independent in the production of war material. It should be emphasized that this development was achieved while a major campaign was being fought in China, and that it does not seem to have been hampered to any considerable extent by that campaign.

With regard to light metals, it is worth mentioning that Japan was already self-sufficient in the production of magnesium in 1935 ; nevertheless, in order to meet the growing demand of armaments, the programme of 1939 foresaw an increase in output of 1,000 per cent. within four or five years.

The position of aluminium, the most important metal for the production of aircraft, is obscured by the fact that production figures are not available since 1937, when home production amounted to 14,000 tons. Import figures were, for strategical reasons, not published. For the previous year—1936—the ratio of home production to import was : 40·5 to 59·5. If we take the same proportion for 1937, this would mean that about 21,000 tons were imported ; it is probable that the import was much larger and that publication of import figures was discontinued because of their size. For her home production Japan used mainly alunite or alum stone from Southern Korea, and bauxite from Greece and the Dutch East Indies. The increasing demand from Japan for aluminium can be judged from the quantities imported from the Dutch East Indies and the percentage they represent of D.E.I. total exports of bauxite (in thousands of metric tons) : in 1938, 120·1 = 44 per cent. ; in 1939, 196·9 = 78 per cent.[3] ; and in 1940, 218·1 = 92 per cent.

[3] In 1939 Japan imported, in addition, 28,000 tons of aluminium metal from Canada, the United States and Norway.

In 1940, a deposit of aluminium shale was discovered in the Hiroshima Prefecture, and several companies are producing aluminium exclusively from this shale. The aluminium produced from shale is said to be inferior in quality to that produced from bauxite.

There appear to be important bauxite deposits in the Palau group of the Japanese mandated islands. They are estimated by Japanese authorities to be some ten million tons. The purity of the ore is said to be very high. Japan hopes to be able to cover about 75 per cent. of her requirements with bauxite from Palau, and the rest from aluminium shale in Manchukuo.

Although Japan has at present no possibilities of importing any aluminium metal from abroad, her position does not seem serious in this respect ; not only can she have accumulated considerable reserves of this metal during the last few years, but she is also able to increase her own production, using her own less economic raw materials. Her position would become much easier were she to succeed in the conquest of the Dutch island of Bintan in the Riouw Archipelago, South of Singapore, with bauxite deposits estimated at ten million tons, and of Johore which exported in 1938 about 56,000 tons of bauxite to Japan.

The Japanese aircraft industry may, like others, experience temporary production difficulties through foreseen or unforeseen bottle-necks ; serious reduction in output owing to such causes is not probable. On the contrary, as long as the Japanese islands remain undisturbed, production will probably increase. Therefore, the reduction of Japanese aircraft production will be one of the immediate strategic aims, once the Allies are able to take the offensive against Japan and provided they possess air bases not too far away. Apart from the bombing of the important industrial plants, the bombing of ports and shipping will have the utmost effect. Japan, like Great Britain, has to rely upon imports, especially for the feeding of her industrial machine. Most of the required materials come from Manchukuo, Korea, occupied China, the Japanese Mandates, and in future perhaps French Indo-China, Thailand and such territories as Japan might temporarily conquer. To disrupt her lifelines, to destroy her ports, means disaster for her industrial and consequently her military machine.

ASSAULT ENGINEER

By CAPTAIN W. R. YOUNG, M.C., Royal Artillery

THE Manual says: "All ranks of the Engineers must understand that they exist solely to assist other arms and services in war." Nevertheless the occasion arises when the supporting arms demand not so much a return for their assistance, as a payment in advance. For Sappers the occasion arises mainly in the offensive battle. If the river is to be bridged or the obstacle to be destroyed the Sapper must survive to do his job. Therefore the other arms must protect him.

All military opinion recognizes that Engineers are valuable commodities which must not lightly be squandered. They must be "sent forward only for specific tasks"; when included in assault parties "their numbers must be kept to a minimum"; they must be "relieved at the first opportunity"; and so on. The P.B.I. may take an odd view of the tender solicitude shown by the higher command for the skilled men; but the Sapper, too, will have his own odd view of the idea that he should not take risks or that he cannot protect himself. Is he not a soldier first and a technician only second?

Which all goes to show how the issue can be confused when argument starts. We can settle it best by a crushing platitude. Specialization increases efficiency. The best combined result will be produced when the Gunner is working his guns, the Infantryman is using his small arms and the Sapper is busy on sapping, demolition or bridging. We come back, then, to the problem of protecting the engineer while he is working at his craft of destruction or construction.

Protection is also a craft and as such must be studied in a practical way. Generalities about "neutralizing the enemy's fire," about "blinding his observation" and about "active patrolling" leave much detail to be filled in by the imagination. And the more precision we can introduce into our imaginings the better.

It is true than an ounce of experience is worth many pounds of theory in these matters, but that applies mainly to moral values. In studying the technique of war our theories are based on war experience and our training, therefore, can also be so based.

It is not within the scope of this paper to provide a gallery for the great variety of pictures which can be painted of the problems confronting the troops who are entrusted with the protection of assault bridging or

demolition parties. Something, however, can be suggested to give a more concrete and detailed content to the generalities quoted above.

Neutralizing the Enemy's Fire

(a) *Small Arms.*—It may be stated that neutralization of small arms fire must be *absolute.* If a single marksman is left to fire undisturbed he may be able to prevent the construction of the bridge or the clearing of the minefield. Now to stop the enemy's small arms fire by means of our own is a fairly easy task. It can be done either by getting in our shot first or by getting in more shots and from more directions than the enemy can.

A simple example will illustrate the value of the first shot. A German and a British rifleman are on the look-out, each from his weapon pit. The German is the first to spot his enemy and takes a shot which goes close to the British head. Down goes that head below the parapet—and that is really the end of the story. For the British soldier cannot put his head up again while the Hun is waiting for him—and survive. This may appear to be a glimpse of the obvious, but the lesson, nevertheless, is frequently ignored, as many can testify who have watched a sniping duel. And the truth of the proposition can be vouched for by many who have observed the paralyzing effect which a report of snipers can have on troops who have cover to hide behind. Many also, no doubt, can, like the writer, own up to having been " neutralized " in this manner themselves. The situation, however, is completely altered if there are *two* British soldiers against the solitary German. Then, of course, the second British soldier shoots the German whose attention is concentrated on the place where the first British head disappeared.

The attacking side will nearly always have to adopt the second method of neutralizing the enemy's fire since the defending rifleman is, for obvious reasons, better placed for getting in the first shot. But having superiority of numbers the attackers can by rapid deployment bring so many rifles into simultaneous action that the defenders can be driven to cover—and kept there. The Sappers can then hope to get on with their job. But we have not yet finished with the enemy.

(b) *Indirect Fire.*—Indirect fire from mortars, infantry guns and field artillery will undoubtedly be included in the enemy's defence plan ; and these weapons are not easily silenced. The problem is one for our own artillery to solve. It is not practical soldiering to demand that every hostile battery or mortar should be discovered and silenced within a given period of time—and all military operations tend to have a time-limit. *Absolute* neutralization, then, of this type of fire cannot be

expected. But against this can be set the fact that the fire of mortars and field guns is never as decisive as direct fire from rifles and machine guns.

The density and intensity of the artillery and mortar barrage can be materially reduced by the countermeasures of our own Gunners. And ammunition supply is a factor which will set limits to its duration. Furthermore, when the Sappers' task is the destruction of a protective obstacle or the clearing of a minefield they can reasonably expect that the enemy's indirect fire will come down at some distance from the obstacle. So that, if they can get *inside* the defensive fire zone before the guns get busy they can escape its effects. It is essential, however, that the Infantry should precede or accompany the Sappers in their forward move or they will themselves be neutralized by the artillery fire when it comes down.

Blinding the Enemy's Observation

Smoke screen is the thought that leaps to the mind when we plan to blind the enemy ; but there are factors to be considered before we make use of this device. Since it is notorious that smoke screens arouse suspicion and draw fire, and since all defence plans include provision for firing on fixed lines, it will be seen that a smoke screen may do more harm than good. It may deprive the attacker of the advantage of surprise and yet do nothing to neutralize the fire of the defender.

Yet smoke we must use, since H.E. shell or bullets cannot deprive the enemy of observation. He can use a periscope or contrive to take a glance round between shells or shots. By mixing a proportion of smoke ammunition with the H.E. of our bombardment we can greatly increase its blinding effect ; and by scattering it about in a haphazard manner we can " mystify and mislead " the enemy. His suspicions will still be aroused but he will not know where to concentrate his attention ; and he may be induced to disclose his defensive fire plan.

The use of smoke at the actual moment of assault will be discussed in the proper place.

Active Patrolling

This includes a great variety of operations. Driving in enemy outposts ; infiltration to facilitate the neutralization of posts defiladed from the front ; the reconnaissance of obstacles and of ground beyond obstacles ; protection of Sappers engaged on technical reconnaissance from surprise by enemy patrols ; infiltration across a river and the establishment of bridgeheads.

It also includes such cold-blooded action as exposing oneself in the open to draw the enemy's fire and engage his attention while the Sapper

is cold-bloodedly determining " the exact types of mines employed " in the minefield by bringing back " specimens whenever possible."

Artillery Support

The Gunner can help in the preparatory phase by methods already referred to; he can also utilize the time in careful registration of datum points so that, when the moment for the assault comes, his shells will land *on* the close target instead of a hundred yards beyond " for safety reasons."

A word or two on close support by artillery will not be out of place here, since few things are more difficult to study in training than this. And it is a question of great importance to the Sapper who may have to instal his equipment under the nose of the enemy.

Infantry in the 1914–1918 war soon learned that it was better to risk the chance of a short shell than the certainty of the machine-gun bullet which would be the result of hanging back from the barrage in an attack. During the 1918–1939 armistice they had time to forget it.

The conditions of peace-time training necessitate an insistence on safety margins which unfortunately have a tendency to become incorporated in our doctrine. And, furthermore, safety margins tend to become cumulative. The result is that artillery which, owing to its high angle fire, can provide such an excellent form of overhead covering fire is often ruled out from the plan because of danger.

Technical examination of danger zones and safety margins can never take into account the factor of " legitimate war risk," and in any case would take up a disproportionate space in this article. We must be content then with a general observation that since troops will *eventually* learn to keep close to the barrage they may as well do it from the start.

Note.—On a semi-technical point it may be considered whether, for very close work, the artillery should use solid shot instead of shell—as we used percussion shrapnel in the last war.

The Attack Against a Prepared Position

In the last War the artillery and infantry had repeatedly to undertake this task. At times the tank came into prominence, but even as late as the end of September, 1918, when the Hindenburg line was breached the decision was forced by the older arms.

In this War the tendency has been to by-pass the strong defences and this, when it can be done, is excellent policy. But, since it is not always possible, we must be prepared still to attack prepared positions and to do so without the advantages of massed artillery and unlimited

ammunition which we could command on the Somme, at Paschendaele and in the Battle of the Hundred Days.

For success we must now depend very largely on the skill and ingenuity of the engineer. He it is who opens the path through the wire for the infantry or through the minefield for the tank. He it is who by his efficient use of explosives can do to a pillbox in minutes what might take the artillery a whole day.

The other arms, knowing that the Sapper is indispensable, must go all out in his support.

Preparation

The Air Force has supplied the mosaic. The minefield is clearly delineated, the wire and the pillboxes can be marked in on our maps, and the time has come for ground reconnaissance.

The infantry filter forward, the artillery splash shells over the landscape, blinding and harassing the enemy and uncovering his hiding places. And the Sapper goes forward to take a look at his job.

Then follows a contest for superiority of fire. The Air Force and the Survey Regiment locate hostile batteries here and there and our counter batteries come into action ; and infantry gradually gain the upper hand in the sphere of rifles, automatics and machine-guns.

Now the Sapper can bring forward his torpedoes and other instruments of destruction, and the moment of assault is imminent—or should be, since all delay is dangerous.

The Assault

The charges are placed, the attacking infantry is assembled, the mortars and the selected field guns are all ready for the fire plan. The rest of the artillery makes no relaxation in its general harassing fire.

A 25-pounder shell comes whistling over and bursts in front of a pill-box. It is followed by others in rapid succession. Then comes a shattering detonation as the torpedoes are fired, and the defenders peer out and wait for the dust to clear. But it does not clear, for the mortars are keeping up a continuous fire of smoke bombs in front of the enemy's defences. The " fixed lines " plan is put into action—but too late. The assaulting infantry is already through the gap and Sappers have gone with them to deal with the concrete forts in the position. Loopholes are blocked, cupola roofs are blown off, garrisons are annihilated or captured—and the tanks go through to exploit the situation.

And there we can leave the battle since we are interested primarily in the work of the Sappers. And that work is now done.

"ASSAULT ENGINEER"

We are threatened by the popular Press and by the fulsome admirers of the Hun with this name. It is doubtful whether the Royal Engineers will welcome it. The Germans have always been prone to make use of glamour terms like "storm battalions," "shock troops" and "assault gun." But then they have little in the way of regimental traditions to rely on, and they lack the sense of humour which is so characteristic of the British soldier. The Sapper will object that "assault engineering" is nothing new. It has always been part of his job—since Badajoz and Cuidad Rodrigo. If he must employ a differential term he will borrow one from Jack Warner and speak of a "blower up of strong points" or a "stopper up of loopholes."

THE TRANS-PERSIAN RAILWAY

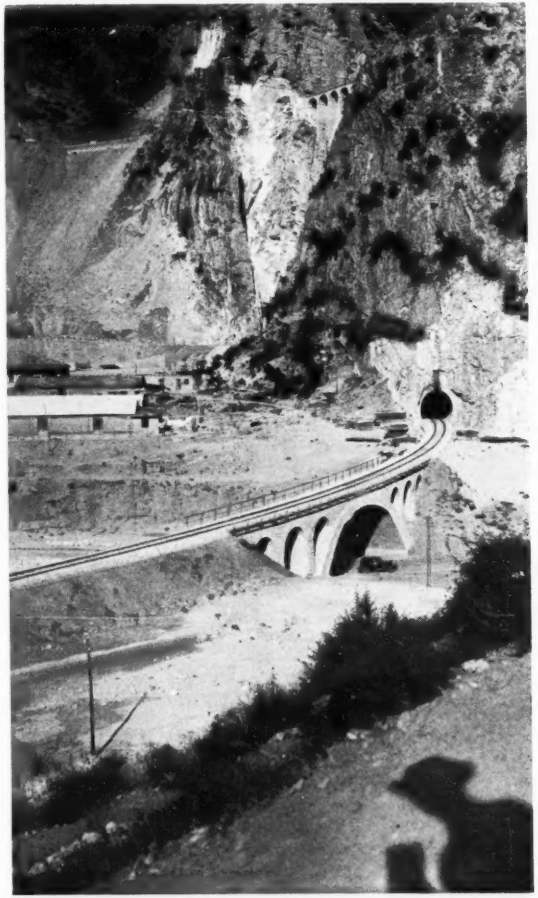
By E. R. YARHAM, F.R.G.S.

WHEN Germany attacked Russia, Mr. Churchill declared at once that our aid to the Soviet Union would only be limited by the capacity of transport to handle it and by geographical difficulties. Although the obstacles have been formidable, that pledge has been fulfilled.

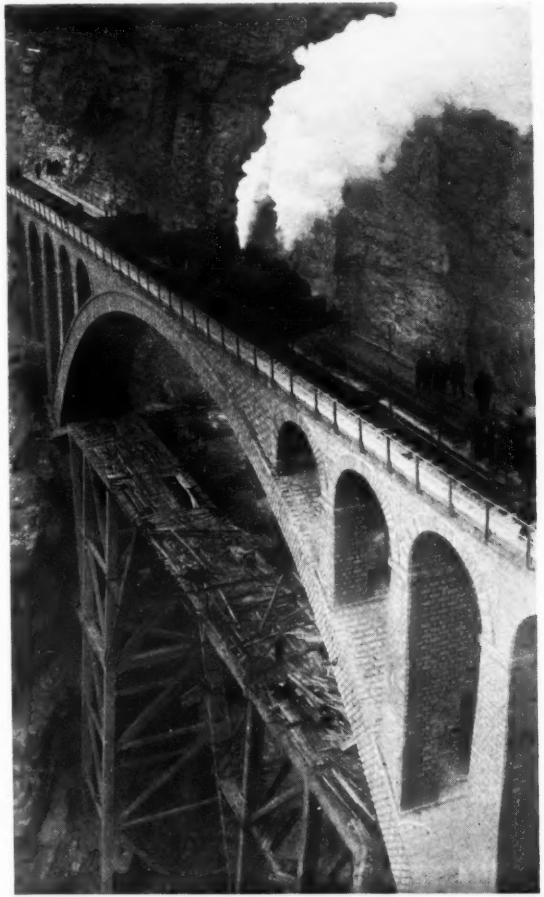
Access to our Ally is not easy : Japan's entry into the War has closed the Vladivostok route ; both the Baltic and the Black Sea are shut to British and Allied shipping ; in the North the lines of communication from Murmansk have been threatened, while Archangel is besieged by ice for five months of the year. Iran, or to use the more familar name, Persia, offers by far the most valuable gateway into Russia ; even though it is not readily accessible to British and American ships it is conveniently situated for supplies from South Africa, India, and Australia.

In former days transport in Persia was seriously handicapped by lack of good roads and railways, and they are still few ; but under the ex-Shah who, despite his shortcomings, was an enthusiast where the modernization of communications was concerned, revolutionary improvements were effected. Of these by far the most important is the famous Trans-Persian Railway—the first and most ambitious railway construction work carried out by Riza Shah-Pahlevi. This magnificent feat of engineering, recognized by engineers as one of the outstanding railway achievements of the century, was once described by Lord Lamington as " the world's last great railway." Perhaps he was right, for few, if any, of the remaining parts of the earth's surface not yet metalled could have offered such nearly insuperable difficulties to the building of this line. To-day there is something spectacular about this long narrow snake of iron road between Bandar Shapur and Bandar Shah, winding its way through masses of towering mountains, athwart great gulfs and over a great sun-baked plateau, where the heat is so intense that even the Arabs dare not touch the rails in the middle of the day. To reach that plateau, with its several fertile valleys running East and West, the line, running North and South, crosses the formidable Elburz Mountains and negotiates the even more massive mountain mass of Luristan. Not many years earlier, the idea of driving a railway almost to their summits would have seemed a foolhardy conception.

Until the pioneers of this railway arrived, little had been altered in Persia since the pre-Christian era, and even the means of transport



THE TEHERAN-BANDAR SHAPUR SECTION



VIADUCT ON A MOUNTAIN SECTION

THE TRANS-PERSIAN RAILWAY

were the same as in medieval times: it still took a caravan many weeks —sometimes months—to make the dangerous and toilsome trek between the Persian Gulf and the capital. Although projects for railways were in the air even before the last war, nothing was done except that the Russians built the line to Tabriz, and a short line was laid South from the Caspian, but afterwards dismantled.

In 1926, however, two American engineers surveyed a route for a line designed to link Teheran with the two richest parts of the country—the oil-bearing region of the South, and the semi-tropical littoral of the Caspian.[1] Work was begun the next year, the southern section from Bandar Shapur being entrusted to an American syndicate, and the northern, between Teheran and Bandar Shah, to a German firm. The ex-Shah officially opened two sections, one in 1929, the other the next year, when he was somewhat unfortunate as his train was twice derailed and finally caught fire. Then the Persian Railway Ministry took over the project, with the idea of completing the line under the guidance of Swedish and American experts. Finally a Danish syndicate was appointed to replace the Swedes and the Americans, and it controlled the entire construction work under the supervision of the Railway Ministry. Various sections were "farmed out" to engineers of other countries, and the work was pushed on with the utmost vigour at the behest of the ex-Shah, who at least had the virtues of enterprise and audacity. Probably few other of the world's great railways owe their construction to engineers of so many nationalities: they came from Austria, Belgium, Denmark, France, Germany, Great Britain, Greece, Italy, Russia, Sweden, and the United States. We can take justifiable pride in the fact that British engineers were responsible for one of the most difficult sections of all, an eight-mile length running through part of the mountain mass of Luristan, which is 120 miles across. It compared in difficulties of construction with blasting a way for the Canadian Pacific Railway across the Rocky Mountains. Credit must be given to the local workmen as well as to the hundred or so trained engineers from the Old and New Worlds and the few score skilled masons brought to Persia to carry out important work on such structures as bridges and culverts. At the peak period of construction between 40,000 and 50,000 workmen were employed, and hardly one of them had ever heard of, much less seen, a railway before in his life. Their chief weakness was a habit, in the South particularly where lack of water was sometimes

[1] The latter is the province of Mazanderan, which grows large quantities of rice, besides sugar and citrus fruits, while there are excellent prospects for tea, American cotton and tobacco. Until the completion of the Trans-Persian Railway most of these commodities were sold to the U.S.S.R., but there has been a growing trade with the barren South of late.

serious, of deserting without a warning at the slightest sign of drought, and disappearing into the desert—of all places; but with his uncanny nose for water, the Arab quickly finds it even in inhospitable wastes where a white man would swiftly perish.

Some idea of the formidable obstacles which had to be overcome may be gathered from the fact that at one place the line takes 41 miles, spiralling up steep gradients, to cover 22 miles as the crow flies; in another section there are no fewer than 150 tunnels in 38 miles; one tunnel a mile is quite common. About 450 bridges and culverts had to be built to overcome the floods to which the desert country is liable. The monthly consumption of cement for these and the tunnel linings approximated 10,000 tons, and 100 tons of explosives were used monthly. All these materials had to be brought up over one of the fiercest zones of heat in the world, where roads are few and poor. Barracks had to be built for thousands of Persian workmen, and hospitals and dispensaries had to be set up and staffed to deal with frequent cases of accident inevitable under such conditions, and with illnesses such as malaria. In some places temperatures soared to over 130 degrees in the shade, and some of the Eurasian workmen died from the ill effects of this blazing environment.

The northern section of the line is the shorter, and until it reached the foothills of the Elburz there were few obstacles; but there the real trouble began. The face of the mountains is extremely steep and the gradients would have been far too severe for any line; so it was made to climb slowly up in huge spirally curved zig-zags to almost 7,000 ft. Leaving the forests at the foot it goes through a rocky gorge no more than 25 ft. wide and actually climbs 6,000 ft. in 50 miles. The difficulties of construction were accentuated by the rottenness of the slopes, and strong retaining walls were necessary. Some of the spirals had to be enclosed in tunnels a mile long and at one place, where a whole hillside was on the move, the rails had to be "threaded" through a concrete tunnel which, itself, had to be kept from slipping down by concrete walls 80 ft. high. Added to these obstacles were those of heavy rain and frequent severe earthquakes. Almost at the summit the line passes through the longest tunnel—over a mile and three-quarters; then it descends under a salt mountain, abuts on the desert, and finally runs into a fine modern station at Teheran. Farther South it touches Qum—holy place of pilgrimage—before crossing the Karun by a splendid bridge five-eighths of a mile long, built by an English firm. This bridge also carries foot and car passengers, and is regarded as the finest structural piece of engineering along the whole railway.

The British section is situated in this southern portion, and a description of the contract reads: "The primary difficulties of this

section lay in its almost complete inaccessibility, precipitous, barren terrain, great variations of temperature, and total absence of paths let alone roads. As well as the great difficulty of making service roads, the eleven British engineers of the firm had to contend with a formidable death-roll among the labour, which was most difficult to obtain and retain on the work. The intense heat also made their own work extremely arduous. The cost of this section of the line was estimated at about £1,000,000. Between the tunnels deep ravines and the torrential Ab-i-Cesar River, which the line crosses and recrosses, had to be bridged, and both the service road and railway formation had to be cut out of precipitous gorges and mountain sides where there is always danger of landslides."

To begin with, an £80,000 road had to be built along the sides of the mountain for the transport of food, workmen and equipment. But before they could start, the engineers had to get to the scene of operations, which meant swimming the river which sometimes rises 20 ft. in an hour, and they finished with blistered feet, arms, legs, and backs, with swollen tongues and parched throats, the result of ten hours working in the scorching heat. The engineers told how they worked in veritable ovens, " particularly in the canyons, where the heat was so great one could not touch the rocks and breathing was difficult." Heat was not the only enemy, for on one occasion bandits attacked a cashier, killed his bodyguards, and got away with £2,000 ; indeed, until the completion of the railway, travellers dared not pass through Luristan unless heavily protected. The British engineers had to drive several tunnels along the Ab-i-Cesar, the longest being over a mile. So accurately was it planned that when the last shot was fired the difference in line was only ½ inch, and the level was dead right. It was so hot even at night that sleep was impossible ; but they toiled on, breaking all known rules for work in such climate—and triumphed. The line was completed in 1938, after just over ten years work, at a cost of £28,000,000. Persian finances have stood the entire cost of the railway, but the heavy monopoly taxes imposed on tea and sugar to meet this liability were among the reasons for the ex-Shah's unpopularity. The cost works out at £35,000 per mile on the average, but some stretches—for example, the British section—through the titanic mountain barriers cost over £100,000 per mile.

Apart from military considerations, what will be the value of this marvellous piece of engineering to Persia ? Actually, even before the present war, it was making its civilizing influence felt, for the ancient systems of transport—camel and pack-horse—were being superseded by motor transport of goods and passengers to the railheads. Already there is evidence of new settlements along the route, and post-war years

should witness the growth of new and modern towns. Just now, however, military considerations prevail, and, unfortunately, before the line could be of much use as a highway of transport for war supplies to our Ally an immense amount of work was necessary. When, after Persia had been weaned from the pernicious influence of the Axis, British and Indian engineers came to examine the line they found that it had only a miscellaneous assortment of engines, about half of which were unserviceable as the result of ignorant handling by the Persian staff, the skilled European cadres having been discharged on grounds of economy. This was but one of many troubles, and a tremendous amount of work has been necessary along the whole of the permanent way. The line was probably working comparatively efficiently according to Persian standards, but there is a vast difference between those and Western conceptions of railway transport, and especially the high standards a war demands. Immediately British and Indian engineers took over, the line was tackled with the object of adapting it to war-time traffic. Military engineers all know that the capacity of a railway in an undeveloped country can usually be largely increased for campaign purposes by the provision of extra sidings and crossing-places for trains and of better distributed shops for minor repairs and rolling stock. Such work has been going ahead rapidly, together with the strengthening of bridges and the improvement of approach roads along the entire length of the 808 miles from Bandar Shapur on the Persian Gulf to the Caspian terminus of Bandar Shah.

Although Britain has played the leading role, the United States have been giving increasing assistance. Mr. Averill Harriman, who headed the American delegation to Moscow, was the first to disclose that his country was helping in the construction work to strengthen the line. Although they were still then at peace, Mr. Harriman declared: "We are not giving lip service to an ideal. We Americans are giving practical service to Russia." In November it was announced that an American mission under Brigadier-General Raymond A. Wheeler would leave for Persia to help to speed up supplies for Russia. The officers of the mission are supplemented by a large staff of civilians to hasten the delivery of supplies, to develop road and rail routes and create facilities for assembling, repairing and maintaining aircraft, tanks, and guns. It was also reported that as many as 300 American locomotives were likely to be sent to Persia particularly for work on the Trans-Persian line. In this country the Prime Minister took swift action, as Lord Beaverbrook revealed: "The Prime Minister's telegram to Stalin was followed by action of the most determined character. In this and in matters of transportation he had taken the most remarkable precautions.

Necessary locomotives and rolling stock for the re-equipment of Persian railways were already in process of delivery."

Indeed, not only Britain but other parts of the British Commonwealth leaped to the opportunity which presented itself. One of the most notable steps was taken by Australia, which decided to send railway stock worth £1,000,000 to Persia. This ranks as one of the most important contributions to the war effort which the Commonwealth has ever made. The Federal Government curtailed trans-continental services in order to send locomotives, and it has kept the remaining New South Wales rolling stock moving 24 hours a day to prevent a local transport bottleneck. Locomotives have also been shipped from India and Hong Kong, while goods wagons, rolling stock, and spare parts have been reaching Persia in increasing volume. It is planned to continue these additions until the end of March at least. By that time the bulk of materials—arms, machinery, tin and rubber—will be immense, but it is hoped that the modernized railway will be able to cope with everything sent, and thus avoid a hold-up of valuable shipping in the Gulf. The objective is to move at least 3,000 tons of goods over the line daily.

Some idea of the difficulties which the engineers have been facing in re-fitting the line for heavy traffic can be judged from the following. The southern terminus is Bandar Shapur, on the Gulf. That place was built largely on ground reclaimed from the sea, but much mud still remains and the jetty had to be built out over a mud-flat. When the British Army arrived last year Bandar Shapur did not deserve the name of port, for only two average-sized steamers could lie by the jetty at the same time. Now it has been altered out of all recognition, and the Persians will have something to compensate themselves with for having temporarily to sacrifice their line, of which they are very proud, to other people's uses. A very marked increase of freight was recorded at Bandar Shapur before the end of the year, vessels of almost every nationality free to trade, including Dutch, Greek, and Norwegian merchant ships, unloading valuable cargoes. By the end of November the former maximum number of trains on the Trans-Persian route had been quadrupled—an astonishing achievement in so short a period of occupation. In addition, a by-pass has been provided in case of congestion: goods are ferried up the River Karun (Persia's only navigable waterway) by lighter to Ahwaz, about 50 miles North of the port, and they are put on the line there.

The shortage of locomotives, already referred to, was especially felt about 100 miles beyond Ahwaz, where there are almost precipitous gradients. Up to that point the line was able to handle the cargoes which were discharged at Bandar Shapur; but from thence onward,

starting at Andimeshk, just to the North of Dizful, the trains had to be divided. This would not have been a disadvantage had there been plenty of locomotives, but they were lacking when the British and Indian engineers took over. In order to obviate this difficulty to some degree, during recent months the bottleneck has been relieved by sending on some materials from Andimeshk by road. By the Spring, however, there should be sufficient rolling stock and locomotives to handle the heaviest freights efficiently. At the extreme North of the line are the twin ports of Bandar Ghaez and Bandar Shah. The latter is the terminus, and it lies on the Turcoman steppe, close to the end of a new military road at Asterabad. Bandar Shah is a new port, but, unluckily, the continually receding Caspian has already left it almost high and dry. The sea at this point is so shallow that a pier 2,000 yards long is necessary. The improvement of the facilities here has been left in the capable hands of our Russian allies. Bandar Shah is linked by regular sea route to the Russian ports of Baku in Caucasia, and Astrakan, situated on the delta of the Volga.

The British Transportation Directorate, fittingly established in the former offices of the German Steel Combine in Teheran, is humming like a hive under the forceful direction of Brigadier-General Rhodes. The amazingly rapid advance of the Imperial armies in East Africa is still fresh in our memories. To a marked degree that was made possible by his work : it was his duty to solve the railway and harbour problems arising from the unprecedented strain on transport imposed by the arrival of many thousands of troops and large amounts of material, particularly at Mombasa. He performed that task with outstanding distinction. During the last war he was Director of Railways, British Salonika Force, and later he was loaned by the Colonial Office to serve as chief engineer, Uganda Railway, and in 1926 was appointed Deputy General Manager and Chief Engineer, Kenya and Uganda Railways and Harbours. Four years later he became General Manager, and under his regime the undertaking has attained a high level of efficiency. The functions of the Directorate in Persia are to plan and supervise the development of road and rail communications, and particularly the considerable enlargement in progress at Bandar Shapur. The appointment of a man of the calibre of General Rhodes is a proof of the determination of the British Government to get all possible aid to Russia, and also of the high strategic importance of the trans-Persian communications.

THE WORK OF THE WOMEN'S ROYAL NAVAL SERVICE IN THE WAR

By Mrs. V. Laughton Mathews, M.B.E., Director—Women's Royal Naval Service.

On Wednesday, December 10th, 1941

Vice-Admiral Sir William J. Whitworth, K.C.B., D.S.O., Second Sea Lord and Chief of Naval Personnel, in the Chair.

The Chairman, on introducing the Lecturer, said that no one was better qualified than Mrs. Laughton Mathews, the Director of the Women's Royal Naval Service, to lecture on that great Service. She was in it in the last war, and since April, 1939, she had been building up and organizing it in this war. To a mere man, dealing with twenty thousand Wrens would seem almost a superhuman task

LECTURE

I REMEMBER the Second Sea Lord speaking once of the bond which exists between all seamen—a common wave length which proclaims them kin, whether Admiral, Merchant Seaman or Fisherman. Would it be presumptuous to claim kinship not only for the professional seamen but for all those who love the sea, the daughters as well as the sons of the men who in following the sea have built British history, share their heritage.

For a short time at the end of the last war women were allowed for the first time to serve alongside the Navy on shore. What a revolution! How the timbers creaked and the sirens shrieked! It was a great experiment and there was not time for it really to get under weigh; but there was time enough to show that there were many jobs in which women could efficiently relieve men for Service afloat. So they had us back when the need was there again. And as the need increases we are allowed in in ever growing numbers and in new and varied categories of work.

The new W.R.N.S. of 1939, although it bears the same honoured name as its predecessor of 1917, was an entirely new organization. When it first started we had numbers of applications saying "I have sailed my own yacht"; "I can manage any kind of small boat"; one or two even had the Board of Trade Certificate for Navigation. But those qualifications were not what we were looking for. What we particularly needed in those early days were clerical workers of all kinds, domestic workers of all kinds, and Wrens for the communications branch—

cypherers, coders, telephonists, teleprinters, and in smaller numbers motor drivers and despatch riders. At first they were only employed on duties conventionally applicable to women, but that time is now past (as it is in civil life) and the aim is to replace men by women in all possible shore appointments. Those three branches—communications, writers, domestic, still create the biggest demands, but there are many smaller categories some of them requiring scientific knowledge or mechanical training and sometimes considerable physical strength.

We began slowly and that made for success. There was no general mobilization of a great force of women, with all that that means in the way of organization, quarters, food and work. The thousand or so women who were called up on the outbreak of war had each a definite job to go to, and the absorption of some of the thousands who had rushed to volunteer for the Navy was steady and gradual—as they were needed and when proper quarters were ready for them. The inestimable advantage of starting on a firm basis, of having the keel "well and truly laid," far outweighed any of the disadvantages, the greatest of which was that we lost a number of excellent applicants who could not, or would not, wait. Yet, in fact, hundreds for whom nothing but the Navy would do, did wait. Very soon at the famous ports of Britain—the naval ports, the commercial ports and smaller places on the coast where naval bases sprang up, the trim navy-blue clad Wrens became familiar figures. At first the sailors used to whistle at them "Every nice girl loves a sailor." But that phase did not last. The Wrens just fitted into the picture and became part of the show, part of that incomparable machine which is called the Royal Navy. So now, after more than two years of war, when the 20,000 mark has been topped, when new members are being enrolled at the rate of about 1,200 a month and the sphere of usefulness of the Service is being constantly expanded, let us take a look at the Wrens at work in December, 1941.

TRAINING

On entry every Wren goes to a Training Depot for at least two weeks—that is with the exception of the Immobiles—the women who work from their homes, and although there were many Immobiles entered in the early days, the vast majority of entries now are mobile. The W.R.N.S. is the only Service which accepts Immobiles, and in spite of the obvious disadvantages in regard to discipline and difficulties in drafting, it does allow us to employ a number of women with young families or other home ties, who have a very definite contribution to bring. It has always been our policy also to post Mobiles near their homes when this is asked for and when the exigencies of the Service permit.

All mobile Wrens pass through a Depot before being drafted. They can have a technical training over a period of weeks or months, such as wireless telegraphist, wireless mechanic, pay clerk, supply assistant, cinema operator, teleprinter, cook. We do not train typists or motor drivers, and communications ratings are trained " on the job." Those who do not need technical instruction spend a fortnight in a Depot undergoing disciplinary training, learning how to behave like a Wren, elementary squad drill, some knowledge of naval history, naval procedure, what all those mysterious groups of letters stand for which we rattle off so glibly. Each of the five Commands centred at Portsmouth, Plymouth, Chatham, Rosyth and Liverpool, where a W.R.N.S. Superintendent is on the staff of the Commander-in-Chief, has a W.R.N.S. Depot taking a 100 Wrens, and in London there is the Central Depot which in all takes about 1,000; this includes a well known London Women's College and a wing of the Royal Naval College, Greenwich. The accommodation at Greenwich is being constantly nibbled off for our Officers Training Course, the numbers of which increase with the needs of the Service.

It is a great thing for the W.R.N.S. that we were allowed to have our Officers Training Course at the Royal Naval College. In those beautiful and historic surroundings where once the young Raleigh laid his cloak at the feet of Queen Bess, which witnessed the triumphant return of Drake's " Golden Hind," history has been born again when women in naval uniform sit side by side with naval officers at a course of naval studies, when they dine in the famous Painted Hall built by the great Wren of former days—the first women to dine there since it became that most sacred of masculine preserves—a naval officers' Mess. Greenwich is the symbol of how the Navy has received the W.R.N.S. and made it its own. If anyone asks me (and they sometimes do) to what I attribute the success of the Wrens, I always put first " Because we are lucky enough to be working with the Navy." Wherever I go I am touched by the appreciation of the Navy for what the Wrens are doing, and nothing goes further than appreciation in achieving results. They speak always of " our " Wrens; " of course our Wrens are exceptional "; " our Wrens are hand picked "; " we have been very lucky in our Wrens." One Captain said when I thanked him for giving up so much time to me, " I am secretly very proud of my Wrens and glad to show them off."

Our smaller Service and its gradual growth has made it possible not only to select our applicants but to draft them as individuals and not as numbers. We pride ourselves on trying to find the right place for everyone and making the best use of civil qualifications. Undoubtedly this has been a very important feature.

WORK IN THE PORTS

And now the Wren is through her training, selected for the job—so away to the Ports, to the coast-line of Britain, so closely linked with history and with the growth of our great maritime nation. In my office I have a pin-stuck map showing where W.R.N.S. are employed—at some 400 Stations round the coast; and there is no naval achievement which has shaken the country since the beginning of war in which the Wrens have not taken their small part in the background—passing signals, plotting ship movements or succouring the survivors.

At Dover the signals about the stirring "Altmark" rescue passed through the hands of the cypher officers and they told me that the excitement was so intense that they could hardly bear to turn over their duties as their watch ended.

At the time of Dunkirk the Wrens, whatever their regular duties, turned to and helped in the feeding, sleeping and clothing of hundreds of sailors. The Chief Officer W.R.N.S.' Report of that time reads :—

1st June, 1940 :—

> "This week has been an eventful one and has therefore seemed much longer than merely seven days. All Wrens are working at top pressure both on and off duty. Volunteers have been helping at the Casualty Hospital and bandage-cutting squads have been working in the Quarters. A Canteen run by Wrens has been opened in the Castle, and tea and sandwiches are being taken to relief crews at the Pier Head. Transport workers are doing splendid work both day and night and approval for two more temporary drivers has been given."

A week later :—

> "The state of emergency continued in this Port until Wednesday of this week. A Rest Room was opened in the Burlington Mansions with a Canteen and 150 beds for survivors. It was run by Wrens and voluntary workers, Wrens from every category turned to and helped. Some hundreds of survivors were fed and lodged there before being drafted to their Home Ports. The transport workers carried on their good work both day and night."

Now, at Dover, which has always been directly concerned in all threats or attempts at invasion, every Wren has her instructions and her duty station if the word should be given. The white cliffs, which saw landings by Julius Cæsar and by William the Conqueror and the frustration of Napoleon's efforts, may yet see Hitler swept from the Channel as Blake once swept the boastful Tromp.

Portsmouth, which has such a big share in the naval history of England, where Nelson's " Victory " keeps sentinel—a symbol of sea power, is the Command which has the largest actual number of Wrens, though concentrated in a comparatively small area. Here are several hundred watchkeepers on the staff of the Commander-in-Chief, who, among their duties dealt with the signals relating to the " Graf Spee " ; hundreds more are at the Royal Naval Barracks ; here too are the clerical and domestic staffs of the various Instructional Schools. Near Alfred the Great's capital of Winchester there is a Wireless Station where I was handed as a memento of a visit a signal, received by a Wren wireless telegraphist, which read :—

> " From ' Orion ' immediate. My 0936 3 cruisers, 3 destroyers bearing 304°, speed 18 knots, approx. course 320°. My position 158°, 34° North 24° East, 4 miles from last reference position."
>
> This was the first intimation of the great Battle of Cape Matapan.

Portsmouth, too, has the headquarters of the Royal Naval Air Stations where, recently, survivors of the gallant " Ark Royal " arrived to be re-equipped. The Paymaster Commander described to me how rapidly and efficiently the W.R.N.S. Supply Assistants competed with this big task. One Wren Supply rating went down a whole row of men asking each the size of his boots, noting the sizes in a note book. She then disappeared and returned in a very few minutes with piles of boots hanging over her shoulder and gave to each man the right size boots. Men were entirely re-equipped with kit at the rate of eight every ten minutes, which was considered a record. Every man left the Clothing Supply Department fully outfitted, and although perhaps the fit may not have been quite Savile Row, to outward appearance they were correctly dressed.

Although the Naval Air Stations are distributed over the British Isles, this seems an appropriate moment to mention their special jobs. Wrens have for some time been employed on the important work of packing parachutes, women not too small with strong wrists and a sense of responsibility being selected for this. They are employed also as battery chargers and as meteorologists They are now being tried out in a number of other interesting jobs. Aircraft Checkers have to identify and check each item in the movable equipment of new aircraft as they come down from the factories. Fabric workers make the fabric coverings for aeroplane wings and for various items of flying kit, for instance engine covers and parts of gloves and gas-masks. Wrens spray the dope which acts as protection to the fabric of the wings. In metal shops they help with a variety of work such as welding, fitting, moulding.

In other sheds they clean and test sparking plugs, charge batteries and help to clean the machinery of aircraft engines before they are finally installed. Women with real mechanical skill can be trained for more intricate jobs and act as Fitter's Mates, or even, after sufficient experience, as Air Mechanics. Wrens also act as Markers at Bombing Ranges. At some outlying ranges they take it in turns to live a camp life in huts on the ranges. If Wrens make good in these trial posts, the part they play at Naval Air Stations may be considerably extended—always provided we can find suitable places for them to live in.

At Plymouth, there are again hundreds of Wrens in the Royal Naval Barracks and on the staff of the Commander-in-Chief. They telephone, they teleprint, they type, they code, they distribute signals, they plot the movement of ships. Besides the large staff of cypher officers, there are, as in the other chief ports, quite a number of W.R.N.S. officers who have replaced naval officers on staff duties and in the Secretariat. Most of these have previously been employed as ratings in operational offices and have undergone the Staff Duties Course at Greenwich.

The red cliffs of Devon have witnessed many historic events in naval history. There three and a half centuries ago Howard and Drake waited until a " pinnace of espiel " brought news of the Spanish Armada in sight to the westward ; on Plymouth Hoe Drake expressed the opinion that there was time to finish the game and beat the Spaniards too ; from the Barbican the Pilgrim Fathers set sail in the " Mayflower." Great historic events ! Yet I wonder if stranger history has ever been made than by these young women in His Majesty's uniform, who work day and night maintaining communications with the ships of the Royal Navy.

It is at Plymouth that the first experiment has been made in what will, no doubt, become quite a common sight at the Ports, the manning of small boats in inland harbours by Wrens. Here is their programme during the two weeks' training : boat orders, procedure in boats, parts of a boat, salutes and duties, rule of the road, lights, bends and hitches, fog signals, compass, buoys, man overboard, signalling, practical boat work. The third week they take over from the naval boat's crews in twenty-four hour watches. Judging from our early applicants, there must have been a number of serving Wrens who had quite a bit of experience to start with. At present they are working in mixed crews, but the idea is that they eventually take over the boats altogether. I understand that they are very good at it and that they love it, which from my long experience of boating with Sea Rangers I can well believe. Plymouth did not wait while a fitting uniform for these water-Wrens

was being discussed, but kitted them up in bell bottoms and jerseys. From Plymouth, too, has come the proposal that Wrens should in part replace the balloon barrage crews for waterborne balloons.

The blue line keeping watch and ward with the Navy continues round the coast; past Falmouth—the chief port of call in recent years for the last of those lovely sailing ships which used to bring home Australian grain, now a naval base with a large quota of Wrens—to the Bristol Channel—Bristol, which grew rich on the rum, sugar and tobacco trade with America; Bristol, the home of John and Sebastian Cabot, and after them Nicholas Thorn, discoverers of Labrador and Newfoundland; Bristol, one of the great commercial ports which were taken over by the Admiralty at the beginning of the War. From fishing village to the black sooty docks of South Wales to the great port itself, on both sides of the Bristol Channel, are units of Wrens, manning the offices, delivering messages—on foot, on wheels, or by boat—coding, cooking, cleaning and servicing the Navy on shore.

Here we are in a new Command—the great Western Approaches Command which stretches from the Bristol Channel to the North West peak of Scotland, centreing at Liverpool—former port of the cotton trade and now one of the great mouths of England. At Liverpool, if one is privileged to enter the Operations Room, one may see charted the whole of the Battle of the Atlantic—plotted by Wrens. You can imagine the excitement which reigns during such episodes as the hunt for the "Bismarck," as it is followed in all its moves. From this Command has come the request, which is likely to be approved, for Wrens to take over similar duties to those enumerated at the Air Stations, at Coastal Stations—duties connected with the maintenance of armament and light craft. Here, too, are batteries to be charged, sparking plugs to be tested, electrical fittings to be kept in order and machinery to be oiled. Here there are machine guns and depth charge pistols to be maintained, woodwork to be painted, canvas gear to be repaired. Women have often lamented that they are needed so largely to cook and wash the dishes. They will be needed for this to the end of time. But we want them now to clean and polish and make and operate machinery in a war where mechanical efficiency is a prime factor.

In the Liverpool Area the number of Wrens has grown prodigiously and house upon house has been taken up as quarters. The whole question of recruitment of Wrens is inextricably linked up with living quarters, once the immobile source has been exhausted. I believe every person who has had to organize personnel on a large scale in this war must have "accommodation" written on their heart. In the W.R.N.S. we have resolutely refused to deliver the goods (*i.e.*, the Wrens) until proper

accommodation is available, and, believe me, this is much more productive of results than trying to get things improved once the Wrens are in. Wren Quarters are either large requisitioned houses—sometimes very lovely ones, or as in the case of Training Establishments and Naval Air Stations, hutted camps built for the purpose. A Training Establishment does not have the changing interest of an operational base but it has special attractions of its own. Here the Wrens are very definitely part of the Ship's Company in work, play and ceremonial. Wrens not only form a large part of the ship's complement, they take part in Divisions and Parades; and they also join in Ship's Concerts and Dances. From what I have seen I should say that the introduction of women to work with the Navy in some of these isolated establishments which are thrown almost entirely on their own resources, is a very healthy influence.

The West Coast of Scotland includes the great shipping centre of the Clyde with Glasgow and Greenock, and in this area history has been made again by a W.R.N.S. officer having replaced a naval officer in executive command of a working naval establishment—an important Inter-Service Communication Centre. In this district, too, are a number of isolated stations situated among lakes and purple hills amid some of the most beautiful scenery in the British Isles. Wrens are largely employed on communications, as writers, domestic workers and as motor drivers. It is very inspiring to see the spirit which exists in some of these small Units. Every individual counts so much in the complete whole, and there is an enthusiasm which shows that we have got the right officers in charge. The Wrens get boating and swimming in the summer; they get tramps on the mountainside; they have the interest of their work, the beauty around them and their own happy comradeship; and they look very fit on it both bodily and mentally.

There are Wrens in Northern Ireland, which boasts the first W.R.N.S. Accountant Officer (followed now by others)—" properly delegated officers " within the meaning of the appropriate section of K.R. and A.I.; Wrens in the Outer Hebrides; large numbers in the Orkneys (they are shortly to invade Lyness); and all down the East Coast of Scotland, with its fishing harbours, to Rosyth, the heart of the Scottish Command. There Admiralty House stands high on a hill looking over the harbour spanned by the beautiful tracery of the Forth Bridge and with the ships lying there strong and silent: a lovely scene.

Here, again, is a large staff of watch-keeping Wrens in the Commander-in-Chief's offices. At one of the small bases near, the organization and routing of convoys, both coastal and sea-going, is, under the Naval Officer in Command, very largely in the hands of W.R.N.S. officers, some of whom have been there since the beginning of the War.

They originate and send out signals—sometimes as many as sixty or seventy for one convoy. A Wren writer in an office at the end of a jetty checks the vessels in and out, knows all the Masters personally and has a cheery word for them when they come in after weeks of what we may truly call the perils of the deep.

At another port in South East Scotland in an office at the end of a pier, Wren radio-telegraphists receive and send out messages in morse to the ships. The men telegraphists have gone to sea and the Wrens have completely taken over the work. "If they were taken away the Station would close," the Captain said.

The Scottish Command has a number of Air Stations and also boasts the W.R.N.S. Wireless School where some three hundred Wrens at a time undergo training in wireless telegraphy.

Many Wrens are engaged on highly confidential duties that cannot be described. Indeed, our most interesting and exciting jobs are the ones we never speak about at all.

Newcastle-on-Tyne—the premier coal port from early times, where in the XIIIth century Edward I. built his galleys and which to-day is responsible for some of the finest ships afloat, and further South the great East Anglian fishing ports—Yarmouth, Grimsby, Harwich, are all stiff with Wrens.

Chatham—Elizabeth's chief port and the third of to-day's Home Ports, finds another busy Commander-in-Chief's staff and great Naval Barracks, and is now a centre of Wren activity, although I remember the excitement when the first hundred Wrens was reached. At each of the Naval Barracks there are large numbers of domestic workers, cooks and stewards. I have always a very warm corner for the domestic categories. They have not got a very romantic or exciting job; they work very hard for not much pay, and their spirit is wonderful. As at the other Home Ports there is a Royal Marine Barracks at Chatham. Also in the Nore Command is the Marine Depot at Deal. The Wrens who work in Marine Establishments wear on their hats instead of a ship's cap ribbon, the globe and laurel badge of which they are very proud.

So home to London—the greatest port of all since Roman times, which has an increasing number of Wren units including a very essential one—W.R.N.S. Headquarters, which works in close co-operation with other Admiralty Departments and under the direction of the Second Sea Lord.

I must not forget to mention the W.R.N.S. units overseas. Singapore was the first; some of the girls regretted that they were going so far

from the War, but it seems determined to have everyone and has now caught up with them. The next party went to the United States of America. Gibraltar also has a unit. Now we are busy collecting a large party for Alexandria. Several other places both East and West are clamouring for Wrens.

PROMOTION

The W.R.N.S. is a thoroughly democratic Service. Promotion to officer rank is from serving ratings, and the tests are character and efficiency. We have the daughters of Admirals and of dockyard labourers, international sports champions, actresses, shop assistants, factory hands, domestic servants, and those who have never done anything before in their lives, all serving as ratings, living in Quarters together, and all very happy. It is not true, just because we have been able to select, that the Wrens are " snooty," as an American journalist suggested to me the other day. Our Wrens are from all sections of life and in all sections we have endeavoured to get the reliable, trustworthy type. There exists, too, a very healthy friendliness between officers and ratings, a relationship which is quite compatible with the best kind of discipline.

Now that the need for woman power is so great, we may be permitted a word of admiration for the thousands who rushed to join voluntarily, often giving up much better paid jobs—a great many of the early Wrens did that—giving up their personal freedom, giving up home life. To understand what that means you must remember to what an extent tradition and upbringing have emphasised the vocation of home life for women, and how they have been made to feel that their personal responsibilities to their parents, husbands, and families, outweighed any wider national duties. To many of them it has not been an easy decision to make. I believe that women will benefit enormously from their Service life and that later life will be fuller and richer on account of it. I believe there will be many better wives and better mothers and that the country is going to find a large number of better citizens.

It has been wonderful to see this great organization grow from nothing; to feel it pulsing with life, growing in health and strength. The latest phase of the War means that the responsibilities of the Navy are greater than ever before and as the Navy expands, inevitably the Women's Royal Naval Service must expand too. On all sides the question is being investigated—how much further can the duties hitherto carried out by men be handed over to women?

" Give me your confidence, Sire," said the younger Pitt to George III, " and I will deserve it." " Deserve my confidence," said the King,

"and you shall have it." Wrens ask for the confidence of the Navy. It is for the Navy to let them prove how much they deserve.

DISCUSSION

PAYMASTER REAR-ADMIRAL SIR DAVID LAMBERT: I should like, if I may, to tell the Director of my experiences. As I go round the different bases and ports I see a large number of Wrens. A high proportion of them are, of course, replacing ratings and officers from my Branch, and it is always the same: the Commanding Officers or Accountant Officers always tell me how very pleased they are with the Wrens, how they buckle to at their work and how well they get on with it. They may have had an early training to start with; some have been entered direct; but always it is the same thing, that they are very satisfactory and very keen, and the officers are very pleased to have them.

CAPTAIN E. ALTHAM, R.N.: Mrs. Laughton Mathews has alluded to the fact that the Wrens are making history. I think it should be on record that she has made history here this afternoon: it is the first occasion in this hundred-year-old Institution that a lady of the fighting Services has given a lecture on her own Service, and that to an audience which includes many other officers of that Service.

Another little piece of history may, I think, be made by the Institution itself in the near future. It was announced in the most recent number of our Journal that at the next Anniversary Meeting the Council will propose an addition to the Bye-Laws which will admit as Members ladies who belong or have belonged to the fighting Services. It may be, therefore, that before long the constitution of this Institution will be extended to embrace those ladies.

THE CHAIRMAN

We would all like to thank Mrs. Laughton Mathews for the very interesting account she has given of the activities of the Wrens. I am sure you will agree with me that this great service has been built up, as she said, on a sound basis, and I feel that as long as they go forward on the lines they have adopted nothing will go wrong with them. I have been round a good many of the Ports and have seen the Wrens there, and the same story has always come from the Commanders-in-Chief I have met—how satisfied they are with the work of the Wrens.

There are women who go into the Auxiliary Services to have a good time, but with the Wren it is service first and a good time second. We are all for them having a good time second, but service must be the mainspring of activity. Mrs. Laughton Mathews asked that the Wrens may have the confidence of the Navy. I can assure her that during all my experience they have had that confidence. (Applause.)

The customary votes of thanks to the Lecturer and Chairman were carried by acclamation.

HINTS FOR OFFICER INSTRUCTORS

By Lieutenant-Colonel A. E. Bagwell Purefoy, *p.s.c.*,†
Royal Artillery

INSTRUCTING their fellow officers in the business of war is a task which many officers nowadays are called upon to perform. In the Unit, not only have T.E.W.T.'s[1] to be conducted; instruction by lecture, demonstration and discussion should also form an important feature of the training programme. In addition to this, the turnover of instructors at War Office, Command and Formation Schools is very large, partly because there are many more such schools than during peace time, and partly because the tenure of appointments is much shorter. Before the war instructors at the Staff College, for example, held the appointment for at least three years; they are now changed after eight or nine months.

It is nowadays the rule rather than the exception for an officer to find himself, at very short notice, on the Directing Staff of an establishment with a high-sounding name, faced by two or three score of his own kind, many of whom are highly intelligent (and critical), and some of whom may be considerably senior to himself. However well endowed with knowledge he may be, this situation is somewhat unnerving, particularly if, as is often the case, he has had little or no previous experience of instructing his equals. He would welcome some guidance but, strange to relate, very little in the way of guidance is available. He therefore has to find his own feet, largely by trial and error, in a trade which demands far higher qualities than many sides of schoolmastering, where the pupils are not argumentative and the instruction deals mainly with facts.

Much of this is necessarily inevitable, since no amount of book instruction can take the place of practical experience. It is hoped, however, that the following notes on a few of the main props on which instruction at military schools is built, compiled by one who, like most victims, had to start from zero, may go a little way towards helping the novice over his first few appearances in public. They may also, perhaps, be of some use to those who have to conduct similar forms of instruction in their units.

Lectures

There is little doubt that the lecture is the hardest form of instruction with which to hold the student's interest. This is fully realized, and at

[1] Tactical Exercises Without Troops.

all Army schools the number of lectures on the programme is reduced to a minimum. However, it has not yet been found possible to get away from the lecture altogether, and a small crop of them almost invariably occurs at the beginning of a course. Thus the new member of the D.S. may well find that his first task is the one in which success is hardest to attain, even though his position, being as it is comparatively free from assault by argument, may appear to him less alarming than those he will have to occupy later. Success is important, for if he can hold his listeners' attention thus early in the proceedings he will have achieved a flying start in the more intimate things to come. Possibly the following hints for keeping the minds of the audience from wandering, some of which are admittedly little more than " dodges," may be of use to him.

The Title.—This, which is too rarely considered, is extremely important. In the first place, an interesting and practical title will focus the attention of the audience beforehand, so that they will come into the room expecting, even if only subconsciously, to hear something of practical interest to themselves. Secondly, before he can compose his lecture, the instructor must have before him a title which clearly defines its terms. In other words, the title of a lecture resembles the Object in an appreciation ; if faultily stated the matter which follows will be faulty. To take an example, too often on the programme for a course appears such an item as " Lecture—Artillery." No lecturer can hope to cover such a subject in three quarters of an hour, and if he tries to—and people sometimes do—three quarters of what he says will be wasted on his audience. If instead, assuming a course at a Company Commanders' school, the subject of the lecture was shown as " Artillery matters which Company Commanders must know," the attention of the audience would be focussed from the start, while the task of the officer who has to compose the lecture would be made easier through his terms of reference having been clearly defined for him.

Use of the Blackboard.—Illustrating a small example on the blackboard at intervals during a lecture is a great help for pinning the attention of the audience. For one thing it stops their eyes wandering round the room and permits these as well as the ears to take in the instruction ; for another it forces the lecturer to give a practical example. For instance, it is easy for him to say that anti-tank guns should have defilade from the front or that machine-guns may fire on a time programme ; what he is driving at will stick in the minds of his hearers far better if he draws, with half a dozen lines, a bird's eye view of the front line, a wood, a fold in the ground and a couple of anti-tank guns, or makes up on the spur of the moment a tiny fire plan which he shows in table form on the board. But as soon as he passes to another subject he should rub it out.

Diagrams, prepared beforehand, have similar uses, but these again should not be displayed till they are actually needed, nor should they be left exposed after they have served their purpose.

Delivery.—Most of the do's and dont's concerned with the delivery of lectures are well known, and it is not proposed to dilate on the subject here. Rehearsal is essential if the flow of speech is to be natural, and this does not mean reading through the lecture sitting in a chair, but standing up with the written work in much the same position as it will be on the day, and making the same gestures towards the imaginary blackboard, diagrams or audience. It always takes longer to deliver a lecture properly than it does to read it through, and it is therefore necessary to time this performance. If such a rehearsal is carried out once or twice, it will be surprising how free and spontaneous the delivery will become. No attempt, however, should be made to deliver the lecture without reference to the written matter. To do so is to risk either omitting some important point or, by forgetting one's words, expressing clumsily a carefully thought-out sentence. At the same time no appearance of reading must be given, and this is best avoided by having, where possible, one's papers nearly at eye level, and standing with the desk slightly to one's left so as not to be hidden from the audience.

The Précis.—There are two kinds of lecture précis; the kind which contains the detailed framework of the lecture, arranged in the form of short notes under the various main headings, and the kind comprising only the bare bones, or main headings, with gaps in between in which students may, if they like, make notes themselves. Which type is used is largely a matter of taste, but if a detailed précis is issued before the lecture care must be taken that it does not show too much, or the lecturer may expose himself to the criticism, sometimes heard, of having "simply read out his précis." It is often safer to issue such a paper afterwards.

In addition to that part of the précis which deals with the lecture itself, there is usually room for certain appendices showing such things as organizations, detailed procedure, specimen tables and so on. The lecturer should always consider carefully what the possibilities are in this respect, and his aim should be to turn out a précis which will be of real value to the student later on. This may easily involve several hours of careful work, but the result will certainly justify it.

Demonstrations

Demonstrations play a large part in the programmes at military schools nowadays, and in the opinion of many students they provide the best instruction of all. They are also comparatively easy things to run

in a unit. Only indoor demonstrations are dealt with here, but the same principles apply to all. There are three main types: the single-handed demonstration, the conversational type in which two or more take part, and the large scale play, which is not discussed here as no brand-new instructor would be called upon to run one. In each case it is necessary for one member, who may or may not be actually taking part, to act as showman, or compère.

Single-handed demonstrations.—The single-handed demonstration is of great value for teaching a subject which, while of importance to all arms, verges on the technical. Examples are the deployment of an artillery regiment or the system of supply in the field. Subjects like these are far better taught on a model than by lecture and diagram, and care must be taken that they are not turned into lectures. The demonstrator should make his preliminary talk as short as possible, his main object being to arouse a barrage of questions, the answers to some of which may be lecturettes in themselves. Near the end of the period the students should be allowed to crowd round the model, and the directing officer should have assistants ready to cope with the many more questions which will be asked during this phase.

The conversational type.—This form of demonstration has much to commend it. It is a change from the monologue of the single instructor, the type lends itself to a very wide range of subjects, and it is much easier to stage than the more ambitious play. One great advantage which it possesses is that it is comparatively easy to introduce some degree of humour into the proceedings. To be able to be funny in a lecture is a gift, and those who do not possess it must not try, but two or three officers conversing together must be dull indeed if they cannot raise an occasional laugh. To do so is worth while for, no matter what the austere school may say, your teaching is a success if you can make your audience laugh. There is no need for any forcing; all that is necessary is for the participants to enter the fray in a cheerful frame of mind, and the laughs will follow—humour is infectious.

The instructor who is told off to run a demonstration of this kind has before him a wide field of possibilities. It can be used to show the planning stage of almost every type of operation, for exploring the possibilities of a new weapon or type of unit, the giving out of orders and a host of other things. Methods which may be employed include the straightforward conversation over a model, the making of a plan followed by the crestfallen commander explaining to his superior why the plan failed, the wrong way and the right way in word pictures, and many variations of these. Needless to say, careful rehearsal is essential, but it is rarely necessary for the participants to know their lines by

heart, as memories can be refreshed by realistically consulting map or notebook whilst another member of the team is speaking. The officer who is detailed to run such a demonstration must definitely take charge, and must remember two important points: first, that whether he makes a winding-up speech or not, some form of introduction, either verbal or written, is always necessary; and second, that the audience must always be given the opportunity of asking questions.

One other point is that, in order that various points which it is desired to bring out may be explained aloud, players acting as commanders have often to show a somewhat lamentable degree of ignorance. This does not matter very much when the audience consists of officers, but the reason for it should be explained when performing before other ranks.

Tactical Exercises Without Troops

T.E.W.T.'s form the hard core of the instruction at any school where tactics is the principal subject taught, and they are usually the items which the novice on the directing staff approaches with the greatest trepidation. This is understandable, for the successful conduct of a T.E.W.T. involves far more than the delivery of a prepared speech or carefully rehearsed part, followed by the answering of a few questions. The instructor has now to hear and take note of answers often long, involved and quite unexpected; he has to perceive and expose weaknesses in those answers, and convince the offenders, who will certainly defend them stoutly, that they really are weaknesses; he has at the same time to recognize merit which may be contained equally in widely different solutions, and last, but not least, he has to "put over" convincingly the official solution, on which the rest of the exercise probably hangs. Add to this that, in the strictly limited time at his disposal, he has to give everyone a fair run for his money and also cope adequately with a torrent of argument, and it can be easily understood that the prospect appears formidable.

Actually, however, the T.E.W.T. is one of the easier forms of instruction to conduct, the main reason being that the attention and interest of the audience, who feel somewhat on their mettle, is easy to hold from the start. Practice naturally gives greater confidence and produces better results, but the novice, whether at a school or in a unit, need have no fear of his first attempt provided he is guided by certain principles which are outlined herewith.

(*a*) *Let the students do the talking.*—In the case of lectures and demonstrations, most of the talking has necessarily to be done by the directing staff. In a T.E.W.T., the instructor should do his utmost to keep his remarks, until the time to sum up is reached, to a minimum.

A useful hint towards achieving this is to try to frame such remarks as he has to make in the form of questions, rather than statements, thereby forcing students to think for themselves. For example, having discussed the composition of a mopping-up party, do not say : " One of its troubles will be prisoners ; how will it deal with these ? " Say instead : " What picture have you of the adventures of this party whilst it is carrying out its work ? " Prisoners will soon be mentioned and this will create the required opening for the question regarding their treatment. More often than not the same procedure should be followed when the instructor is asked a question ; instead of answering it directly he should turn it over to another student to answer. Again, a solution having been given out by one syndicate, comments on and criticisms of it should come from other syndicates rather than from the directing staff, and it is in fact no exaggeration to say that the less the instructor says the more he teaches.

(*b*) *Keep notes of students' answers.*—No matter how good the instructor may think his memory is, in order to make sure no point is missed he should take brief notes of the main answers given to all but the quickest of problems. Not only will these enable him to pick out faulty or controversial points to feed into the subsequent discussion ; they will often provide the only anchor for keeping argument within bounds. It is highly advantageous if, when one member accuses another of having made some particularly outrageous statement and the defendant replies indignantly that, far from having done so, his plan was almost in exact accordance with the latest manuals, the instructor can, quoting from his notes with cold realism, remind the opposing parties of the exact words.

(*c*) *Prepare thoroughly beforehand.*—This maxim applies not only to the D.S. Notes, or " pink paper " as these are often called, but also, which is sometimes overlooked, to the actual narratives which are issued to the students. When discussing a problem it is disconcerting, to say the least of it, to be pulled up by a student for basing one's argument on data different from that issued to the syndicates, and yet, strange though it may seem, it is quite an easy trap to fall into. For example, a narrative is issued in the form of orders for a battalion attack. The fire support includes a machine-gun company less one platoon. During the course of an argument about the fire plan the instructor, if he does not know the narrative well, may forget the missing platoon and base his argument on a complete company. This may appear far-fetched, but it does happen, and the moral is study the white paper beforehand at least as well as, if not more carefully than, the pink.

As regards the D.S. Notes, whilst the instructor should have studied these thoroughly, he should on no account attempt to do without them

altogether when conducting a problem. If the scheme has been well prepared the D.S. Notes will be very thorough, and if the instructor does not refer to them occasionally he will run the risk of missing some important point, thus detracting from the value of the instruction. If the D.S. Notes are used quite openly, for the obvious purpose of ensuring that no point is omitted, the instructor need have no fear of gaining the reputation of being " helpless without the pink paper."

Presenting the D.S. solution.—This part of the T.E.W.T. is the one with which the beginner is likely to have most difficulty. It is important that he should expound the solution convincingly, in order that his hearers may go on to the next problem, which will usually be based on the D.S. answer to the previous one, with the feeling that they have been given sound lines to work on. Nothing is so calculated to destroy interest as the thought in a student's mind that a sound commander would never have put him in the position where he is faced with the problem in question. The instructor must therefore marshal his reasons for the course chosen very carefully, and give out the final answer concisely and with conviction. If the answer consists of verbal orders or an appreciation, for the delivery of which there is a set sequence, this is easy to do. For other types of answer, such as describing action which would be taken under certain circumstances, the best way of expounding it must be carefully thought out, for the delivery of the answer should be instruction in itself.

Having heard the D.S. solution, students should always be allowed an opportunity of criticizing it. Some of these criticisms may be very sound ones, and when they are the directing staff must always be ready to admit the fact. The correct line to take is that it is by no means the only possible answer—the problem is a poor one if it is—but that in the opinion of the directing staff it is the best answer, because it best applies the principles needed to solve the problem.

Discussions

Of recent years discussions have come into considerable favour as a method of instruction. Besides forcing students to read their books, they are a means of obtaining a general airing of views on a subject, and they provide useful practice in expressing those views clearly and concisely. They usually take the form of two or three questions on a particular subject, such as Attack, which are issued as agenda a few days in advance. Their value rests largely in the discussion which takes place within each syndicate of students in preparation for the main meeting. As far as the directing staff are concerned they are probably the hardest things of all to conduct, and the beginner should, where he can, watch an older hand manage one or two before attempting to take

the chair himself. This may not always be possible, but the tyro should come through fairly creditably if he remembers certain principles.

To begin with, as in the case of T.E.W.T.'s, his aim should be so to handle matters that nearly all the talking is done by the students. When two of them express opposite views, they and their supporters should be made to argue it out between them. The great difficulty comes when either the views of nearly all the students coincide or when they are all unwilling to talk. It is then that the instructor with a gift for this type of work can start the wheels turning by a provocative remark or question, and the novice must try his best and in time he will acquire some skill, though the real experts are born, not made. Before starting the discussion, it is a good plan to announce that any one of the students may be called upon to sum up at the end ; this ensures attention from all, and is also very good practice, since to give a fair summing up requires considerable skill.

If a question involves the giving out by a student of a series of points, such as, for instance, points for special attention when training for night operations, the chairman must take great care not to allow the first speaker merely to give out a long list of headings. If he does he will ruin the discussion, as everyone will have an almost exactly similar list and there will be little or nothing to discuss. The only way to deal with such lists—if there must be questions which involve them—is to break them up by making the speaker enlarge upon and give reasons for each point in turn. Although all syndicates may have the same points on their lists the chairman is very unlucky if there is no divergence of views on the methods of implementing those points.

As in the case of lectures, the blackboard is a useful aid to holding students' attention and keeping their feet on the ground. The chairman should endeavour to make use of it continually in order to illustrate diagrammatically courses of action put forward during the discussion. It is sometimes a good plan to make a student illustrate his own thesis on the board ; this frequently helps to keep the debate alive.

The D.S. Notes to a discussion usually take the form of a short summing up, with or without a conclusion. As in the case of a T.E.W.T. they should be consulted in order to ensure that no important point has been left out, but during the actual debate the instructor will be well advised to put them aside, and concentrate his attention on the speakers.

Conclusion

The foregoing notes on four of the principal methods of giving instruction at military schools are not intended as an essay on how to teach. Their object is to help the officer newly posted to the directing

staff to come creditably through the first few occasions on which he will be in charge of the instruction. There is of course much that he will have to learn for himself as time goes on, but given a good start he will gain confidence and gradually acquire a technique of his own. The same applies to an officer who is called upon to give similar instruction in a unit, and who has had little or no previous experience of the type of work involved.

In conclusion, the newly joined member of the D.S. may be reminded that his position resembles that of the prisoner at the bar, who is assumed to be innocent until proved guilty ; the students will assume him to be a capable instructor unless and until he proves himself to be an incapable one. Let him therefore enter the lists with a confident bearing, secure in the knowledge that he will be given a fair chance.

THE EAST AFRICAN CAMPAIGN, 1914-1916

By MAJOR-GENERAL S. H. SHEPPARD, C.B., C.M.G., D.S.O.

THE East African campaign of 1914–18 was the Cinderella of the side-shows of the last War. This is hardly to be wondered at. It began with a failure. It was a campaign of gradual progression, rather than of spectacular successes. There were no detailed maps available to the man in the street, so that it was very difficult to follow the movements of the forces engaged. And, except in 1916, when public interest was aroused by the appointment of General Smuts as Commander-in-Chief, there were no regular Press Correspondents.

For cognate reasons, the compilation of a History of the Campaign must have presented extraordinary difficulties; and the author must be warmly congratulated on having produced such a lucid and readable volume.[1] The division into short chapters, each more or less self-contained, greatly simplifies its perusal; while the Calendar of contemporary events at the beginning of the book is extremely interesting. The numerous maps and sketches are clear, and not hampered with too much detail. They are of great value in elucidating the various actions and situations concerned.

Chapter I gives a short precis of the history of East Africa before 1914. The note at the end of the chapter, giving the physical characteristics of the theatre of war, should be most carefully read.

The student of the campaign must begin by trying to visualize the vast extent of the area of operations. German East Africa was nearly twice the size of the Germany of 1914; Portuguese East Africa was as big as France. From Kilimanjaro to the Zambezi was as far as from Paris to Constantinople; Dar-es-Salaam to Lake Tanganika, as from Paris to Naples. And over two-thirds of this vast territory stretched the Bush. It was almost pathless. It included giant forests with dense undergrowth, elephant grass ten feet high, or thick thorn-bush only passable by a rhino. It was considered "open" if one could see an enemy at twenty yards. In many parts of the theatre of war, two considerable opposing forces might be only as far apart as Victoria and Wimbledon, and yet be totally unaware of each other's presence. Fighting in the bush was like fighting in a mist. This, in time, told on

[1] *Official History of the Great War: Military Operations, East Africa. Vol.* I. *August,* 1914—*September,* 1916. By Lieut.-Colonel Charles Hordern. (H.M. Stationery Office.) £1 1s.

the nerves of the bravest; for a man fifty yards away from his fellows felt as if he was alone in Africa.

The author has a most interesting paragraph on wild animals. In addition to those he mentions, the gentle and harmless giraffe caused much annoyance by carrying away the field telegraph lines, normally 12 feet in the clear; these had, in giraffe country, to be put up to 25 feet, which doubled the time of construction.

Chapter II gives a concise account of the situation in British East Africa and Uganda on the outbreak of war, and tells of the arrival of the first Indian contingent, Indian Expeditionary Force "C."

A Note at the end of Chapter III describes the situation on the German side. Dr. Schnee, the Civil Governor, wanted to keep out of the war as long as possible, to stand strictly on the defensive, and to withdraw all German forces to the interior of German East Africa. But Colonel Von Lettow-Vorbeck, the Commander of the Defence Forces, had very different ideas. He considered it his task to defend German East Africa to the limit, thereby "containing" as many British troops and as much British shipping as possible. And, rightly deeming that offence was the best form of defence, he concentrated the bulk of his as yet small force at or about Moshi, whence he could threaten the very vulnerable and strategically important Uganda Railway, the life-line of British East Africa and Uganda.

The next three chapters are devoted to a detailed—and very fairly stated—account of the reverse at Tanga. "The India Office had no adequate military intelligence data on which to base its estimate of requirements" for what was at first known as the Dar-es-Salaam Expedition, for which Indian Expeditionary Force "B" was earmarked. On 28th August, 1914, a cable from the Secretary of State for India postponed the start; but by mid-September the threat to British shipping in the Indian Ocean from the "Königsberg," "Emden" and other potential raiders was so real that the project was revived. "The immediate object was not now merely to seize Dar-es-Salaam; it was to deprive the enemy of all potential bases on the German East Africa coast. From that, it was but a short step to the prospect of ultimately seizing the whole German Protectorate."

This extremely ambitious plan was modified before I.E.F. "B" sailed from Bombay on 16th October, 1914. It was decided that the Force should first occupy Tanga, further steps being left to the discretion of the Commander.

I.E.F. "B" was a very "scratch" force. The units, the commanders and the staff were mostly strangers to one another. None had

had any training in bush warfare. And several of the units were of such poor fighting material, that they would have been considered " easy meat " by the least formidable of the North-West Frontier tribes. Owing to the very scanty and generally erroneous information as to the internal state of affairs in German East Africa and of the fighting value and morale of the German forces, it was probably considered that, given a sufficient show of force on our part, the Colony was ready to fall into our hands like a ripe plum.

The story of Tanga gains in interest by the note at the end of Chapter VI, giving the German account of the operation.

On 22nd November, 1914, the War Office assumed control of East African operations, and made it very clear that for some time to come these operations were to be confined to the defence of British territories.

The whole of the forces in the Northern Area were amalgamated. Much re-organization was necessary. The morale of our troops had naturally suffered from the recent defeats, while that of the enemy had vastly improved. In the words of the German Commander, " Tanga was the birthday of the soldierly spirit in our troops."

Chapters VII to XI deal in detail with the period up to September, 1915. Such operations as took place during that time were necessarily on a small scale. Mafia Island, off the mouth of the Rufigi River, was occupied by us in January, 1915.

Jasin, a German post about fifty miles South of Mombasa, taken by us on Christmas Day, 1914, was attacked three weeks later, and surrendered after a stiff fight.

Major-General Tighe assumed command of the Northern Area in April, 1915. Welcome reinforcements having arrived, Bukoba was successfully attacked in June, 1915. Situated on the western shore of Lake Victoria, it was the German administrative centre for the district South of Uganda. In August, the Royal Navy carried out a most successful operation, resulting in the destruction of the German cruiser " Königsberg " in the Rufigi River. In the Southern Area, a determined attack on Saisi, a post on the border of Northern Rhodesia, was beaten off. This not only enhanced Allied prestige among the native tribes, but sowed the seeds of Belgian co-operation, which was later to become so valuable.

Administrative measures during this period included the inception of the Voi-Maktau Railway ; improvements to water supply on that route ; the birth of a Carrier Corps ; and expansion of the King's African Rifles, though on a very small scale.

Meanwhile, the enemy had not been idle. Continual raids on the Uganda Railway caused frequent derailments, and Von Lettow took advantage of the lull in 1915 to recruit and train askari and carriers from the numerous warlike tribes in German East Africa. His transport was entirely carrier. These men, after having been " shot over," formed a valuable and immediate reserve to replace casualties in the ranks.

In November, 1915, it was decided by the British Government that steps should be taken " to ensure the conquest of this German colony with as little delay as possible," and General Smith-Dorrien was selected as Commander-in-Chief, while General Northey was appointed to the command of the Southern Area.

South Africa had offered to provide the bulk of the reinforcements ; and when General Smith-Dorrien was compelled by ill-health to resign the command, General Smuts was his obvious successor. Active preparations for the new offensive had been proceeding, and by 4th March, 1916, all was in readiness for the advance. The comparative strengths of the opposing forces at that date were not so uneven as they appear on paper. Von Lettow's aim was to keep as much of his force " in being " for as long a time as possible and, while actively delaying our advance, to avoid a decisive engagement to a finish. He knew the country which was to be the area of operations, while to us it was mostly a *terra incognita* of pathless bush. His force was homogeneous ; while ours was, in General Smuts' words, " a most heterogeneous army, drawn from almost all continents, and speaking a babel of languages."

The German organization was well suited to bush warfare, the unit being a company of 200 askari, with 250 African carriers, and about 20 German officers and N.C.Os. with two or more machine-guns. This high proportion of white personnel greatly increased the fighting value of the unit. Our African and Indian regiments could seldom count on more than 3 per cent. of British personnel—a grave handicap.

Malaria and other diseases took heavy toll of white and Indian troops, especially when exhausted by long marches and short rations ; while the tse-tse fly played havoc with horses. Von Lettow's Germans suffered less in this respect as—retiring on to well-found bases of supply—he was able to feed them well. Though the key-note of his strategy was defence, it was by no means passive. Tactically, the Germans depended mostly on their machine-guns for fire effect, keeping the bulk of their askari for counter-attack.

General Smuts had quickly decided that the first step was to clear the Moshi area. Once this was occupied by us, all threat to British East Africa would be removed, and a good base secured for a further advance. Speed was essential, as the rains might break at any time in March.

The enemy was holding a strong position between Kilimanjaro and the Pare Hills. General Smuts' plan was to attack this frontally with the 2nd Division, while the 3rd South African Brigade and the South African Mounted Brigade made a turning movement via Lake Chala on the North, and the 1st Division from Longido, passing to the West of Kilimanjaro, was to cut the German lines of communication running West and South.

Chapters XV and XVI describe the operations.

By 23rd March, after a stiff fight at Taveta and another on the Ruvu River, the Germans had been ousted from the whole of the Moshi area; but they had been able to retire in good order down the Usambara Railway; and it was found—as future events were to prove again and again—how difficult it was to time an enveloping movement such as that of the 1st Division with any degree of accuracy in trackless bush.

The rainy season, now setting in, rendered immediate pursuit impracticable. General Smuts had three alternatives: (*a*) to attack the enemy main force with all available troops after the rains, (*b*) to advance after the rains southward and westward on two lines, (*c*) as for (*b*), but to move a force to Kondoa Irangi at once. He decided on the third alternative; and the newly-constituted 2nd Division, under General Van Deventer, was detailed for the westward move. Pages 271–276 give a graphic picture of this 200 mile-march through difficult country, with a good deal of fighting, and hampered by incessant rain. Casualties (mostly climatic) in men and horses were heavy; but by 1st May, the 2nd Division was established at Kondoa Irangi, where it remained for the next two and a half months. The rest of the force was formed into the 1st Division, under General Hoskins, with Divisional and Force Reserves, and began its march down the Pangani River on 22nd May.

General Smuts' next objective was the Central Railway. Chapters XVIII to XXI describe this phase of the operations. The 1st Division, after engagements near Bwiko, Mkalamo, Lukigura, and the Wami River, reached Morogoro on the Central Railway on 26th August. Meanwhile, the 2nd Division had arrived at Kilosa, fifty miles to the West, on 22nd August.

The Uluguru mountains seemed to present a formidable barrier to a further German retreat, and General Smuts made determined efforts to close the known passes with his mounted troops; but again the enemy's knowledge of the country served him well, and he withdrew successfully southward.

By the end of September, 1916, the main German forces had been pushed South to the Mgeta River, thus ensuring the safety of the Central

Railway; the Royal Navy and land forces had secured the coast-line North of, and including Dar-es-Salaam; combined operations by Allied forces in the North-West (Chapters XXIV–XXVI) had resulted in the occupation of the Central Railway from Kigoma to Tabora, and the country to North and North-West of it, by the Belgians; while in the Southern Area General Northey, by a series of skilful actions north-eastward from the Nyasaland–Rhodesia border, had penetrated as far as Iringa (Chapters XXVII and XXVIII).

Spurred on by the magnetic personality of their Commander-in-Chief, General Smuts, his troops had performed wonderful feats of endurance, and cheerfully endured much hardship; but the situation is well and fairly summed up in Chapter XXIX: "Some two-thirds of the German protectorate had passed into Allied possession. Yet the primary object of all war—defeat and elimination of the enemy's forces—was not attained."

The History closes with most interesting Appendices and an excellent General Index.

INTERNATIONAL SITUATION

THE DANGERS OF APPEASEMENT

APPEASEMENT is a word which has long been popular with the professional diplomat, the League of Nations theorist, and the Peace Party crank. In the past it has too often proved synonymous with weakness, and it has no place in the vocabulary of war.

We know now that the fateful gesture of appeasement at Munich in September, 1938, was but the prelude to the world chaos of to-day. Mr. Chamberlain and M. Deladier secured for their countries a year's respite from war at a price which was expected to be limited to the surrender by Czechoslovakia of territory inhabited mainly by Germans. It is likely to remain a matter for argument as to whether the Allies or Germany made the best use of that year of grace. Whatever the answer, the fact remains that this was only the culmination of a series of acts of appeasement to which we had subscribed ever since our foreign policy was dominated by the frothy idealism of Geneva, and our fighting Services had been disintegrated by mad adherents to the doctrine of " collective security."

Looking back, we can trace the first major step towards disaster in the policy of appeasement adopted by the League when German troops marched into the Rhine Zone early in 1936. That was a flagrant violation of the Treaty of Versailles and of the Treaty of Locarno. It was also a direct challenge to the whole power and status of the League and to the value of collective security. But that futile body, lacking an effective body-guard, instead of turning the aggressor out and preserving law and order in Europe with a firm hand, contented itself with self-righteous verbiage and useless memoranda. Hitler had made the crucial test : he had " tried it on the dog " and found to his satisfaction that it was no trusty watch-dog, but a wretched mongrel of international origin which preferred appeasement to attack. From that time he went forward with increasing confidence and from strength to strength.

When, at length, he overstrained the tolerance of Britain and her Continental allies and war came, the same attitude of appeasement was adopted towards Italy. But Mussolini had not long since defied the most cherished precepts of the League and actually attacked and over-run the territory of a fellow member—and Britain had found herself alone in trying to administer mild chastisement in the form of sanctions. So the blandishments of gentle diplomacy stood little chance

against Hitler's sabre rattling; with the downfall of France Italy cast in her lot with an uncompromising Germany.

On 7th December last Japan made a devastating attack on the U.S. fleet in Pearl Harbour while the avenues of appeasement were still being explored in Washington and London. That it was as treacherous an act as has ever blackened the pages of history does not alter the fact that it caught a great Power unawares because our statesmen were still living in a world of words, whereas the rulers of Japan had taken a leaf out of Hitler's book and employed words as a smoke-screen for intended action.

For many years this policy of appeasement has hamstrung our armed forces, and even during the present war it has often prevented our forestalling the activities of our enemies, especially in neutral countries. In time of peace it assisted fifth columnists and " quislings " to promote their pro-German and anti-British propaganda. In war it disposes shaky neutrals to yield to the demands of what appears to them to be the stronger, because more forceful, beligerent.

On those occasions when military policy has over-ridden outworn diplomacy—as in Syria, Irak, Persia and Timor—we have stolen a march on our enemies to our great advantage and their discomfiture. It is evident, therefore, that the days of international blandishments and bargaining are dead. Victory is for the strong, the swift and the ruthless.

WAR DIARY

The War Diary in this and future numbers will be found at the end of the Journal.

VOLUME I

Volume I of the War Diary covering the period 3rd September, 1939, to 31st August, 1940, is now on sale—price 2s. 6d. bound in stiff cover, packing and postage 5d.

This volume includes a map showing the operations of the B.E.F. in Belgium and Northern France, May, 1940.

VOLUME II

Owing to the greatly increased cost of printing and restrictions on the supply of paper, it is not possible to publish Volume II in the same form as Volume I.

Members can, however, have the Diary pages extracted from their own copies of the Journals for November, 1940, to November, 1941, inclusive, and bound in stiff covers, similar to Volume I, at a charge of 2s. 6d., postage extra. Alternatively Members can have the four copies of their Journal, with the War Diary included, bound in buckram for 7s. 6d., postage extra. With these will be inserted a Corrigendum containing the more important corrections which have come to light since the Diary was compiled.

VOLUME III

As from the publication of this Journal, the War Diary will be compiled in a form which will facilitate it being extracted from Members' Journals and bound annually.

NAVY NOTES

GREAT BRITAIN

H.M. The King

The King and Queen visited Portsmouth on 4th December, and in the course of a six hours tour saw officers and men of the principal naval establishments. They took luncheon with the Commander-in-Chief, Admiral Sir William James, in Nelson's cabin on board H.M.S. " Victory."

Flag Promotions

The Admiralty announced on 26th January that the following promotions of Flag Officers had been made :—

Vice-Admiral Sir Wilbraham T. R. Ford, K.C.B., K.B.E., promoted Admiral in H.M. Fleet, to date 31st December, 1941.

Acting Vice-Admiral Alban T. B. Curteis, C.B., promoted Vice-Admiral in H.M. Fleet, to date 31st December, 1941.

Flag Appointments

On 27th November it was announced that the following appointments had been approved by the King :—

Vice-Admiral Henry R. Moore, C.B., C.V.O., D.S.O., to be a Lord Commissioner of the Admiralty and Vice-Chief of Naval Staff, in succession to Acting Vice-Admiral Sir Tom S. V. Phillips, K.C.B., to date 21st October, 1941.

Vice-Admiral Edward L. S. King, C.B., M.V.O., to be a Lord Commissioner of the Admiralty and an Assistant Chief of Naval Staff, in succession to Vice-Admiral Henry R. Moore, to date 21st October, 1941.

The following appointment has also been approved :—

Rear-Admiral H. T. C. Walker to be Director of Personal Services, in succession to Vice-Admiral W. E. C. Tait, to date 19th November, 1941.

Selection of the following officers for sea-going commands was also announced on 27th November :—

Vice-Admiral W. E. C. Tait.

Rear-Admiral Sir Tom S. V. Phillips.

Rear-Admiral P. L. Vian.

Eastern Fleet.—On 2nd December, concurrently with the arrival of the " Prince of Wales " and " Repulse " at Singapore, it was announced that the appointment taken up by Rear-Admiral Sir Tom Phillips was that of Commander-in-Chief, Eastern Fleet, with the acting rank of Admiral, and with his flag in the former ship. Rear-Admiral A. F. E. Palliser was appointed Chief of Staff to Admiral Phillips. The " Prince of Wales " and " Repulse " were sunk on 10th December by air attack off Malaya.

Vice-Admiral Sir Geoffrey Layton, formerly Commander-in-Chief, China Station, took over the duties of Commander-in-Chief, Eastern Fleet, when Admiral Sir Tom Phillips was reported missing. On 7th January it was officially announced in Singapore that Vice-Admiral Layton had left Singapore to organize the Fleet, so that the Allies may gain sea supremacy in the Far East as soon as possible. Rear-Admiral E. J. Spooner was to continue in command as Rear-Admiral, Malaya, and in charge of Naval Establishments at Singapore, during the absence of Vice-Admiral Sir Geoffrey Layton.

On 26th January, the Admiralty announced that the following appointments had been approved :—

Admiral Sir Wilbraham T. R. Ford to be Commander-in-Chief, Rosyth, in succession to Vice-Admiral Sir Charles G. Ramsey, K.C.B., about April, 1942.

Vice-Admiral Lionel V. Wells, C.B., D.S.O., to be Flag Officer Commanding, Orkneys and Shetlands, in succession to Vice-Admiral Sir T. Hugh Binney, K.C.B., D.S.O., to date 7th January, 1942.

Vice-Admiral Ralph Leatham, K.C.B., to be Flag Officer-in-Charge, Malta, in succession to Admiral Sir Wilbraham T. R. Ford, to date 19th January, 1942.

Honours and Awards

Victoria Cross.—On 12th December it was announced that the King had approved the grant of the Victoria Cross for outstanding valour, determination and leadership in command of H.M. submarine " Upholder " to Lieutenant-Commander Malcolm David Wanklyn, D.S.O., R.N. On the evening of 24th May, 1941, while on patrol off the coast of Sicily, Lieutenant-Commander Wanklyn sighted a southbound troop convoy, strongly escorted by destroyers. The failing light was such that observation by periscope could not be relied on, but a surface attack would have been easily seen. The " Upholder's " listening gear was out of action. In spite of these severe handicaps, Lieutenant-Commander Wanklyn decided to press home his attack at short range. He quickly manœuvred his craft into a favourable position, and closed in so as to make sure of his target. By this time the whereabouts of the escorting destroyers could not be made out. Lieutenant-Commander Wanklyn, while fully aware of the risk of being rammed by one of the escort, continued to press on towards the enemy troopships. As he was about to fire, an enemy destroyer appeared out of the darkness at high speed, and he only just avoided being rammed. As soon as he was clear he brought his periscope sights on and fired torpedoes which sank a large troopship. The enemy destroyers at once made a strong counter-attack, and during the next twenty minutes dropped 37 depth charges near " Upholder." Failure of his listening devices made it harder for him to get away, but with the greatest courage, coolness and skill he manœuvred the " Upholder " until she was clear of the enemy and brought her safe back to harbour.

Before this outstanding attack, and since being awarded the D.S.O., Lieutenant-Commander Wanklyn had torpedoed a tanker and a merchant vessel. He has since continued to show the utmost bravery in the presence of the enemy. He has carried out his attacks on enemy vessels with skill and relentless determination, and has since sunk one destroyer, one U-boat, two troop transports of 19,500 tons each, one tanker and three supply ships. He has also probably destroyed by torpedoes one cruiser and one destroyer, and possibly hit another cruiser.

On 30th November it was announced at Alexandria that the first V.C. of the Mediterranean Fleet had been awarded posthumously to Petty Officer Alfred Edward Sephton, Portsmouth Division, for very gallant conduct on board the cruiser " Coventry " on 18th May. The " Coventry " was patrolling with the cruiser " Phoebe " when an S.O.S. was received from the hospital ship " Aba." A large group of Junkers attacked the " Aba " and the two cruisers independently, the " Coventry " engaging several targets in turn. Diving steeply, they scored a near miss with bombs that caused no damage, and then sprayed the cruiser with machine-gun fire. Sephton was a director-layer, and a bullet penetrating the director passed through his body and wounded a second man, A.B. Fisher. Although grievously wounded and bleeding profusely and in great pain, Sephton

carried on throughout the final attacks. He knew that, owing to the cramped space around the director and the difficulty of access, he could not be relieved until the end of the action. The official report added : " His heroism in carrying on under these conditions set a magnificent example to Fisher, who was also able to carry on, thus maintaining the efficiency of the director. It is considered that Sephton's heroism and fine example may well have saved both the " Coventry " and the " Aba." Relieved after the action, Sephton climbed out of the director unassisted, but collapsed on the deck. He died the following day and was buried at sea.

NEW YEAR HONOURS.—The following were included in the New Year Honours conferred by the King :—

K.C.B.—Vice-Admiral Sir Wilbraham T. R. Ford, K.B.E., C.B. ; Vice-Admiral Ralph Leatham, C.B.

C.B.—Rear-Admiral C. G. Sedgwick (Retired), Rear-Admiral F. H. W. Goolden (Retired), Rear-Admiral C. M. Graham (Retired), Rear-Admiral D. A. Budgen (Retired), Engineer Rear-Admiral F. R. G. Turner, Temporary Surgeon Rear-Admiral G. Gordon-Taylor, Colonel-Commandant (Acting Major-General) R. G. Sturges, R.M.

C.M.G.—Captain H. B. Taylor, R.N., for services to the Foreign Office.

K.B.E.—Admiral Bertram S. Thesiger, C.B., C.M.G. (Retired), Vice-Admiral Raymond Fitzmaurice, D.S.O. (Retired).

C.B.E.—Rear-Admiral J. W. Clayton (Retired), Engineer Rear-Admiral H. Bleackley, Captain (Commodore, 2nd Class) D. A. Casey, R.N.R., Captain (Commodore, 2nd Class) R. P. Galer, R.N.R., Captain E. R. Archer, R.N., Captain C. Caslon, R.N., Captain J. G. L. Dundas, R.N., Captain J. Figgins, R.N., Captain C. C. Hughes-Hallett, R.N., Captain H. R. G. Kinahan, R.N., Captain C. H. Lush R.N. (Retired), Captain S. M. Raw, R.N., Engineer Captain C. E. Lowe, R.N. (Retired), Paymaster Captain M. G. S. Cull, R.N., Paymaster Captain E. H. Drayson, R.N., Mrs. E. S. M. Laughton Matthews, Director W.R.N.S., Miss A. Ralph, Queen Alexandra's R.N. Nursing Service.

ACTION OFF TARANTO.—On 11th November it was announced that a C.B. had been awarded to Captain William Gladstone Agnew, R.N., H.M.S. " Aurora," for " gallantry, skill and resolution in a brilliant night action south of Taranto, against odds, in which, without hurt or loss to the Royal Navy, ten enemy supply ships were wholly destroyed, one destroyer sunk, and at least one other badly damaged."

ALBERT MEDAL.—The *London Gazette*, on 4th November, 1941, announced the posthumous award of the Albert Medal to Commander W. R. Marshall-A'Deane, D.S.O., D.S.C., R.N., for a very gallant deed during the invasion of Crete. When his ship, the " Greyhound," was bombed and sunk, Commander Marshall-A'Deane was among the survivors picked up by the " Kandahar." Later in the day H.M.S. " Fiji " was sunk, and H.M.S. " Kandahar " again went to the rescue. Commander Marshall-A'Deane, despite the ordeal he had already been through that day, dived overboard in the gathering darkness to rescue men in the water. He was not seen again. Commander Marshall-A'Deane had twice been mentioned in despatches in the present war. He gained the D.S.C. for services in action while commanding the " Greyhound," and the D.S.O. " for courage and skill in a successful attack on an Italian submarine."

Personnel

Officers' Cap Badges.—Owing to the difficulty in obtaining adequate supplies of officers' cap badges of the standard embroidered type, the King has approved, as a temporary measure, of a metal cap badge similar in design to the embroidered type being worn by officers.

Paymaster Cadets.—The King has approved that no distinctive title should be employed for junior officers of the Accountant Branch during their period as Cadets. Successful candidates from the October, 1941, Navy entrance examination who were entered for this Branch were ordered to be known, not as Paymaster Cadets, but as Cadets. They will only wear the white stripe when they leave the R.N. College, Dartmouth, on appointment afloat, when they will assume the title of Paymaster Midshipmen.

Salvage Officers.—A new Order in Council provides that naval salvage officers may receive, in addition to their naval pay and allowances, a special salvage allowance in lieu of the salvage awards or salvage bonuses to which they might otherwise be entitled. Approval is given for the payment, as from 3rd September, 1939, of salvage allowance at rates of £400 a year for grade I officers, £250 a year for grade II officers, and awards not exceeding £100 a year for officers of rank not higher than Sub-Lieutenant and ungraded officers under training.

Tropical Allowance.—An Order in Council of 27th November stated that the Admiralty were of opinion that conditions in the turrets of 5.25-in. gun cruisers are comparable with those for which the payment of tropical allowance at the rate of 1s. 6d. a day is authorised for certain ratings in 8-in. and 6-in. gun cruisers. Sanction for the payment of this allowance was given accordingly.

Women's Royal Naval Service

The Duchess of Kent, Commandant, inspected units of the Women's Royal Naval Service on 9th December at a Fleet Air Arm station and a wireless telegraph station in the Southern Counties.

Because of the great expansion of the W.R.N.S. and the need for more officers, the Admiralty, it was announced on 14th November, were accepting a limited number of women with outstanding experience and qualifications for "special entry," within the ages of 21 to 45.

ROYAL NAVAL RESERVES

Seniority for War Service.—Under previous Orders in Council, permanent officers of the R.N.R. and R.N.V.R. may be granted additional seniority for meritorious war service. An Order in Council dated 10th October, 1941, provides that such seniority may be regarded as "mobilized service" for the purpose of qualifying for increments of pay, subject to the condition that the increased rate of pay for which the officer becomes eligible will not be issued in respect of any period prior to the date of the award.

ROYAL MARINES

The following promotions have been made to date 31st December, 1941:—

Lieutenant-Colonel to Brevet Colonel.—Lieutenant-Colonel (Acting Colonel Commandant, temporary Brigadier) R. H. Campbell.

Major to Brevet Lieutenant-Colonel.—Major (Acting Lieutenant-Colonel) H. T. Tollemache.

The following promotions were announced in the *London Gazette* on 16th December, 1941 :—

Lieutenant-Colonel A. N. Williams to be Acting Colonel-Commandant (temporary Brigadier), 20th November, 1941.

Colonel-Second-Commandant (temporary Colonel-Commandant) (temporary Brigadier) A. C. St. Clair-Morford, C.B.E., M.C., to be Colonel-Commandant (temporary Brigadier), 3rd October, 1941.

Lieutenant-Colonel (acting Colonel-Second-Commandant) H. D. Weir to be Colonel-Second-Commandant and Acting Colonel-Commandant (temporary Brigadier), 3rd October, 1941.

ALLOWANCES.—An Order in Council of 10th October, 1941, provides that specialist allowance of 2s. 6d. a day may be paid to Lieutenants and Captains, R.M., possessing special technical qualifications whilst appointed to carry out the duties of R.D.F. technical officers, surveying officers, and landing officers; and that non-specialist allowance of 1s. a day may be paid to unqualified officers performing these duties in lieu of a qualified specialist.

DOMINIONS AND COLONIES

AUSTRALIA

LOSS OF THE "SYDNEY."—It was officially announced in Australia on 2nd December that H.M.A.S. "Sydney" had been in action with a heavily armed merchant raider which she sank by gunfire. The information was received from survivors from the enemy ship, who were picked up some time after the action. No subsequent communication had been received from the "Sydney," and it must be presumed that she had been lost. Extensive search by air and surface units failed to locate any survivors. The "Sydney's" complement included 42 officers and 603 men. The missing included five officers of the Royal Navy.

Captain Joseph Burnett, R.A.N., who was in command, was one of the first entries in the Australian Naval College when it was opened at Osborne House, North Geelong, on 1st March, 1913. He served during the last war as a Midshipman in H.M.A.S. "Australia" from April, 1917. Later he specialized in gunnery, and attended the Naval Staff College course as a commander and the Imperial Defence College course as a captain. He was Assistant Chief of Naval Staff, Melbourne, prior to taking command of the "Sydney" in May, 1941.

LOSS OF THE "PARRAMATTA."—The loss was also announced on 2nd December of the Australian-built sloop "Parramatta" by torpedo attack while serving with the Mediterranean Fleet. There were only 20 survivors from the 161 officers and men in her company.

CANADA

SHIPBUILDING.—For the first time in Canadian history, eight warships—four corvettes and four minesweepers—were named in one ceremony in October last at the shipyards at Sorel, Quebec. Speaking in the Canadian House of Commons in November, Mr. C. D. Howe, Minister of Munitions, gave the following figures of shipbuilding production :—

Corvettes, 77 launched; 50 delivered.

Minesweepers, 59 launched; 40 delivered.

Patrol Boats, 11 delivered.

Smaller Boats, 700 delivered.

10,000-ton Cargo Boats, 3 launched; total to reach 100 by end of 1942.

ARMY NOTES

His Majesty the King

On 21st November, 1941, the King inspected units of the Brigade of Guards in the Eastern Command.

The King has been pleased to approve the following appointments :—

To be Aides-de-Camp General to the King—

General Sir Walter K. Venning, K.C.B., C.M.G., C.B.E., M.C. ; 18th November, 1941.

General Sir H. Maitland Wilson, G.B.E., K.C.B., D.S.O. ; 24th November, 1941.

To be Aides-de-Camp to the King—

Colonel Sir Geoffrey S. Church, Bt., C.B.E., M.C., T.D., T.A. ; 30th November, 1941.

Colonel (temporary Brigadier) H. C. Murgatroyd, M.C., T.D. ; 31st December, 1941.

To be Hon. Surgeons to the King—

Major-General G. Wilson, C.B.E., M.C., M.B. (late R.A.M.C.) ; 13th October, 1941.

Colonel (temporary Brigadier) D. T. Richardson, M.C., M.B. (late R.A.M.C.) ; 29th October, 1941.

Major-General R. E. Barnsley, M.C., M.B. (late R.A.M.C.) ; 28th November, 1941.

To be Hon. Physicians to the King—

Lieut.-Colonel (temporary Colonel) S. Smith, M.B., F.R.C.P., Royal Army Medical Corps ; 13th October, 1941.

Colonel R. Sweet, D.S.O., M.B., Ch.B., F.R.F.P.S., Indian Medical Service ; 12th July, 1941.

Colonels Commandant—

Major-General N. M. MacLeod, D.S.O., M.C., to be Colonel Commandant, Royal Engineers ; 16th November, 1941.

Major-General (acting Lieut.-General) E. F. Norton, C.B., D.S.O., M.C., to be Colonel Commandant, Royal Artillery ; 6th December, 1941.

Lieut.-Colonel (Hon. Brigadier) A. J. Gatt, O.B.E., M.C. (retired pay) to be Colonel Commandant, Royal Malta Artillery ; 6th December, 1941.

Major-General A. A. Goschen, C.B., D.S.O. (retired pay) to be Colonel Commandant, Royal Artillery ; 18th October, 1941.

Colonels of Regiments—

The Rt. Hon. W. L. S. Churchill, C.H., T.D., LL.D., M.P., to be Colonel of the 4th Queen's Own Hussars, Royal Armoured Corps ; 22nd October, 1941—and also Honorary Colonel of the Royal Sussex Regiment, 14th November, 1941.

Honours and Awards

Victoria Cross.—The King has been pleased to approve the award of the Victoria Cross to Lieutenant A. R. Cutler, Australian Military Forces—in recognition of most conspicuous and sustained gallantry during the Syrian campaign, and of outstanding bravery during the bitter fighting at Merj Ayoun.

Among numerous honours and awards granted in recognition of distinguished services in the Middle East during the period February to July, 1941, the following may be noted :—

K.B.E.—Lieut.-General J. D. Laverack, C.B., C.M.G., D.S.O., Australian Military Forces.

C.B.—Major-General J. G. W. Clark, M.C.

Major-General (temporary) H. B. W. Hughes, D.S.O., O.B.E.

The New Year Honours List of 1st January, 1942, included the following awards :—

G.C.B.—Field-Marshal Sir John G. Dill, K.C.B., C.M.G., D.S.O.

K.C.B.—Lieut.-General the Hon. H. R. L. G. Alexander, C.B., C.S.I., D.S.O., M.C.

Lieut.-General T. S. Riddell-Webster, C.B., D.S.O.

Lieut.-General B. C. T. Paget, C.B., D.S.O., M.C.

General Sir Thomas A. Blamey, Kt., C.B., C.M.G., D.S.O.

C.B.—Lieut.-General A. Hood, C.B.E., M.D., K.H.P.

Lieut.-General Sir Wilfrid G. Lindsell, K.B.E., D.S.O., M.C.

Major-General M. N. MacLeod, D.S.O., M.C.

Major-General R. T. Snowden-Smith, C.B.E.

Major-General A. H. Loughborough, O.B.E.

Major-General R. H. Allen, M.C.

Major-General G. N. Macready, C.M.G., D.S.O., O.B.E., M.C.

Major-General W. W. Green, D.S.O., M.C.

Major-General (acting Lieut.-General) H. B. D. Willcox, D.S.O., M.C.

Major-General (acting Lieut.-General) E. C. A. Schreiber, D.S.O.

Major-General K. M. Body, C.M.G., O.B.E.

Chaplain-General to the Forces, the Rev. C. D. Symons, M.C., M.A., D.D., K.H.C.

Major-General K. M. Loch, M.C.

Colonel (temporary Major-General) J. N. Kennedy, M.C.

Colonel (local Brigadier) S. G. Menzies, D.S.O., M.C.

Major-General R. Dening, M.V.O., M.C., Indian Army.

Major-General H. Finnis, M.C., Indian Army.

Major-General J. F. H. Nugent, D.S.O., Indian Army

Major-General (temporary Lieut.-General) H. D. Wynter, C.M.G., D.S.O., Australian Military Forces.

K.B.E.—Lieut.-General L. V. Bond, C.B.

Major-General S. J. P. Scobell, C.B., C.M.G., D.S.O.

Major-General (acting Lieut.-General) A. F. Smith, C.B., D.S.O., M.C.

Major-General B. C. Freyberg, V.C., C.B., C.M.G., D.S.O.

K.C.I.E.—Lieut.-General D. K. McLeod, C.B., D.S.O., Indian Army.

Knight Bachelor.—Major-General F. Gwatkin, C.B., D.S.O., M.C., Indian Army.

The undermentioned, in recognition of distinguished services in the Middle East, was on 6th January, 1942, awarded the *K.B.E.* :—

Major-General L. J. Morshead, C.M.G., C.B.E., D.S.O., E.D.; Australian Military Forces.

Appointments and Promotions

The following appointments have been announced :—

To be Chief of the Imperial General Staff.—General Sir Alan F. Brooke, K.C.B., D.S.O.; 25th December, 1941.

To be Commander-in-Chief, Home Forces (with acting rank of General).—Lieut.-General B. C. T. Paget, C.B., D.S.O., M.C.; 25th December, 1941.

To be General Officer Commanding, Burma.—Lieut.-General T. J. Hutton, C.B., M.C.; 29th December, 1941.

To be G.O.C.-in-C., South-Eastern Command.—Lieut.-General (temporary). B. L. Montgomery, C.B., D.S.O.; 25th December, 1941.

To be specially employed.—Field-Marshal Sir John G. Dill, K.C.B., C.M.G., D.S.O.; 25th December, 1941.

The following promotions have been announced :—

Field-Marshal—

General Sir John G. Dill, K.C.B., C.M.G., D.S.O., A.D.C. Gen., to be Field-Marshal; 18th November, 1941.

Generals—

The undermentioned Lieut.-Generals to be General :—

Sir George J. Giffard, K.C.B., D.S.O.; 12th December, 1941.

Sir Frederick A. Pile, Bt., K.C.B., D.S.O., M.C.; 25th December, 1941.

The undermentioned Lieut.-General to be acting General :—

Sir Henry R. Pownall, K.B.E., D.S.O., M.C.; 5th December, 1941.

Lieut.-Generals—

The undermentioned Major-Generals (temporary Lieut.-Generals) to be Lieut.-General :—

Sir H. Colville B. Wemyss, K.B.E., C.B., D.S.O., M.C.; 21st October, 1941, with seniority 11th August, 1941.

A. N. Floyer-Acland, C.B., D.S.O., M.C.; 18th November, 1941, with seniority 12th August, 1941.

T. R. Eastwood, C.B., D.S.O., M.C.; 5th December, 1941.

The undermentioned Major-Generals (acting Lieut.-Generals) to be Lieut. General :—

C. A. Bird, C.B., D.S.O. ; 25th December, 1941, with seniority 8th August, 1941.

T. J. Hutton, C.B., M.C. ; 12th December, 1941.

The undermentioned Major-Generals (acting Lieut.-Generals) to be temporary Lieut.-General :—

Sir Alan G. Cunningham, K.C.B., D.S.O., M.C. ; 19th October, 1941.

S. R. Wason, C.B., M.C. ; 11th November, 1941.

M. F. Grove-White, C.B., D.S.O., O.B.E. ; 11th November, 1941.

H. G. Martin, C.B., D.S.O., O.B.E. ; 11th November, 1941.

T. R. Eastwood, C.B., D.S.O., M.C. ; 20th November, 1941.

G. Le Q. Martel, C.B., D.S.O., M.C. ; 9th December, 1941.

The undermentioned Major-Generals to be acting Lieut.-General :—

N. M. S. Irwin, C.B., D.S.O., M.C. ; 7th November, 1941.

H. E. de R. Wetherall, C.B., D.S.O., O.B.E., M.C. ; 10th September, 1941 (to 8th December, 1941).

E. L. Morris, C.B., O.B.E., M.C. ; 18th November, 1941.

C. W. M. Norrie, D.S.O., M.C. ; 6th October, 1941.

A. E. Nye, M.C. ; 5th December, 1941.

A. E. Grasett, C.B., D.S.O., M.C. ; 7th November, 1941.

J. A. H. Gammell, C.B., D.S.O., M.C. ; 25th December, 1941.

G. N. Macready, C.B., C.M.G., D.S.O., O.B.E., M.C. ; 19th December, 1941.

The undermentioned Colonel (temporary Major-General) to be acting Lieut.-General :—

N. M. Ritchie, C.B.E., D.S.O., M.C. ; 27th November, 1941.

Major-Generals—

The undermentioned Colonels (temporary Major-Generals) to be Major-General :—

F. K. Simmons, C.B.E., M.V.O., M.C. ; 12th November, 1941, with seniority 9th June, 1941.

A. E. Nye, M.C. ; 18th November, 1941.

Sir Oliver W. H. Leese, Bt., C.B.E., D.S.O. ; 12th December, 1941, with seniority 26th October, 1941.

J. L. I. Hawkesworth, C.B.E. ; 25th December, 1941, with seniority 27th October, 1941.

The undermentioned Colonels (acting Major-Generals) to be Major-General :—

C. G. Woolner, M.C. ; 1st October, 1941.

W. H. C. Ramsden, C.B.E., D.S.O., M.C. ; 6th October, 1941.

F. H. N. Davidson, D.S.O., M.C. ; 11th October, 1941.

I. S. O. Playfair, D.S.O., M.C. ; 21st October, 1941.

G. Wilson, O.B.E., M.C., M.B. (late R.A.M.C.) ; 29th October, 1941.

A. T. Miller, M.C., A.D.C. ; 4th November, 1941, with seniority 17th July, 1938.

R. H. Lorie, C.B.E. ; 5th December, 1941, with seniority 21st September, 1941.

The undermentioned Colonels (temporary Brigadiers) to be Major-General :—

D. T. Richardson, M.C., M.B., K.H.S. (late R.A.M.C.) ; 28th November, 1941.

L. T. Poole, D.S.O., M.C., M.B., K.H.P. (late R.A.M.C.) ; 28th November, 1941.

The undermentioned Colonels to be Major-General :—

A. C. Biggam, O.B.E., M.D., F.R.C.P., K.H.P. (late R.A.M.C.) ; 29th October, 1941.

D. C. Monro, M.B., F.R.C.S., K.H.S. (late R.A.M.C.) ; 28th November, 1941.

R. E. Barnsley, M.C., M.B. (late R.A.M.C.) ; 28th November, 1941.

The undermentioned Colonels (acting Major-General) to be temporary Major-General :—

S. W. Kirby, C.I.E., O.B.E., M.C. ; 13th March, 1941.

J. T. Crocker, D.S.O., M.C. ; 22nd October, 1941.

N. M. Ritchie, C.B.E., D.S.O., M.C. ; 28th October, 1941.

A. E. Nye, M.C. ; 1st November, 1941.

Sir Oliver W. H. Leese, Bt., C.B.E., D.S.O. ; 9th November, 1941.

R. F. E. Whittaker, O.B.E., T.D. ; 12th November, 1941.

E. V. H. Fairtlough, D.S.O., M.C. ; 12th November, 1941.

D. Paige, M.C. ; 16th November, 1941.

G. A. Rickards, D.S.O., M.C. ; 15th November, 1941.

J. E. T. Younger ; 15th November, 1941.

M. B. Burrows, D.S.O., M.C. ; 1st December, 1941.

J. L. I. Hawkesworth, C.B.E. ; 9th December, 1941.

R. L. McCreery, D.S.O., M.B.E., M.C. ; 14th December, 1941.

D. H. Pratt, D.S.O., M.C. ; 1st January, 1942.

W. C. Holden, C.B.E., D.S.O., M.C. ; 3rd January, 1942.

Captain and Brevet-Major (acting Major-General) M. J. H. Bruce, R.A.S.C. (Reserve of Officers) to be temporary Major-General and War Substantive Colonel ; 20th November, 1941.

The undermentioned Colonels (temporary Brigadiers) to be acting Major-General :—

S. W. Kirby, C.I.E., O.B.E., M.C. ; 13th March, 1940.

K. J. Martin, D.S.O. ; 6th October, 1941.

W. R. C. Penney, D.S.O., O.B.E., M.C. ; 10th October, 1941.

J. M. L. Grover, M.C. ; 13th October, 1941.

C. W. Norman ; 15th October, 1941.

Sir Colin A. Jardine, Bt., C.B., D.S.O., M.C. ; 22nd October, 1941.

H. Lumsden, D.S.O., M.C.; 15th October, 1941.

W. G. Michelmore, D.S.O., M.C., T.D.; T.A.: 30th October, 1941.

R. M. Scobie, M.C.; 17th October, 1941.

D. F. McConnel, C.B.E., D.S.O.; 16th October, 1941.

F. A. M. Browning, D.S.O.; 3rd November, 1941.

H. Price-Williams, D.S.O., M.C.; 1st October, 1941.

W. J. Eldridge, C.B.E., D.S.O., M.C.; 1st December, 1941.

R. A. Savory, D.S.O., M.C., Indian Army; 11th October, 1941.

A. Galloway, C.B.E., M.C.; 27th November, 1941.

H. E. Roome, C.B.E., M.C.; 21st November, 1941.

K. F. D. Gattie, D.S.O., M.C.; 22nd November, 1941.

A. A. B. Dowler; 15th November, 1941.

F. W. L. Bisset, C.B.E., D.S.O., M.C.; 15th December, 1941.

J. A. Campbell, D.S.O.; 15th December, 1941.

A. I. Macdougall, D.S.O., M.C.; 15th December, 1941.

H. T. MacMullen, C.B.E., M.C.; 15th December, 1941.

R. M. Wootten, C.B., M.C.; 15th December, 1941.

D. M. V. Beak, V.C., D.S.O., M.C.; 30th December, 1941.

L. F. Keightley, O.B.E.; 27th December, 1941.

I. C. Grant, C.B.E., D.S.O.; 15th December, 1941.

The undermentioned Colonels to be acting Major-General:—

C. H. Gairdner; 2nd November, 1941.

H. A. Freeman-Attwood, O.B.E., M.C.; 3rd November, 1941.

G. Lammie, C.B.E., M.C.; 17th November, 1941.

L. H. Cox, C.B.E., M.C.; 15th December, 1941.

D. S. C. Evans; 2nd January, 1942.

War Substantive Lieutenant (local Major-General) J. Buckley, D.S.O., M.C., to be acting Major-General; 16th October, 1941.

Lieut.-Colonel (temporary Brigadier) W. E. Clutterbuck, M.C., Royal Scots Fusiliers, to be acting Major-General; 18th November, 1941.

To be local Major-General:—

Colonel R. J. Blackham, C.B., C.M.G., C.I.E., D.S.O., retired pay (late R.A.M.C.); 13th October, 1941.

THE ARMY IN INDIA.—The India Office has announced the following appointments and promotions:—

To be Commander-in-Chief in India.—General Sir Alan F. Hartley, K.C.S.I., C.B., D.S.O., A.D.C.

To be G.O.C.-in-C., Southern Command.—General A. B. Haig, C.B., M.C., Indian Army; 24th October, 1941.

To be Chief of the General Staff, India.—Lieut.-General E. L. Morris, C.B., O.B.E., M.C.

To be Adjutant-General in India.—Major-General W. H. G. Baker, C.B., D.S.O., O.B.E.; 24th October, 1941.

To be Deputy Quartermaster-General in India.—Major-General R. L. Bond, C.B.E., D.S.O., M.C.; 8th August, 1941.

To be Divisional Commander.—Major-General H. V. Lewis, C.B., C.I.E., D.S.O., M.C., Indian Army; 8th August, 1941.

To be District Commanders (with acting rank of Major-General) :—

Colonel (acting Brigadier) C. M. P. Durnford, Indian Army; 15th October, 1941.

Colonel (temporary Brigadier) K. F. D. Gattie, D.S.O., M.C.; 22nd November, 1941.

Major-Generals—

The undermentioned Colonels, Indian Medical Service, to be Major-Generals :—

H. J. M. Cursetjee, D.S.O., K.H.S.; 12th July, 1941.

W. C. Paton, M.C., K.H.P.; 23rd August, 1941.

GENERAL

THE EIGHTH ARMY.—It has been revealed that the principal elements of the Eighth Army in Libya, commanded by General N. M. Ritchie, are the XIII Corps (Lieut.-General A. R. Godwin-Austen) and the XXX Corps (Lieut.-General C. W. Norrie).

HONG KONG GARRISON.—The garrison of Hong Kong that was forced to capitulate on 25th December, 1941, consisted of :—

British battalions ...	2nd Battalion, The Royal Scots.
	1st Battalion, The Middlesex Regiment.
Canadian battalions...	One battalion, Winnipeg Grenadiers.
	One battalion, Royal Rifles of Canada.
Indian battalions ...	2nd Battalion, 14th Punjab Regiment.
	5th Battalion, 7th Rajput Regiment.

together with the Hong Kong Volunteer Defence Force and the normal complement of units of the Royal Artillery, Royal Engineers, Royal Signals and ancillary services. Units of the Royal Navy and of the Hong Kong Naval Volunteer Reserve and detachments of Royal Marines co-operated with the military forces.

CADET FORCE.—The War Office announced last December that the Cadet Force is to be largely expanded. The annual capitation grants are to be increased to 11s. a head for school units and 13s. a head for open units, for boys between 14 and 17 years.

Free uniform is also to be provided for cadets between these ages, but it may be some time before issues can be made. Future entrants to the Junior Training Corps will also have free uniforms, and the capitation grant payable to contingents will be issuable at 15 instead of 16.

The training of the Cadet Force has recently been brought up to date, and is now designed to give boys pre-military instruction which will be of value to those who join the Regular Army or the Home Guard. Units of the Cadet Force are

already affiliated to Home Guard units, and although the Cadet Force is not part of the Home Guard every encouragement is given to cadets to join the Home Guard when they are old enough.

NEW RIFLE AND BAYONET.—A rifle of a new pattern is being issued to British troops. It has a bayonet only 6 in. long, compared with the existing 16½ in. type.

The new rifle is called the Mark 4. It has much the same mechanism as other rifles, but is easier for mass production. The new bayonet has four fluted sides, and its scabbard is the shape of a narrow cone. The Mark 4's are being issued as soon as they are available, but they are not displacing the patterns now in service.

CIVILIAN CASUALTIES.—Figures of British civilian air-raid casualties since the compilation of monthly statistics are as follows :—

	Killed.	*Injured and detained in hospital.*	*Total serious casualties.*
September, 1940 ...	6,954	10,615	17,569
October, 1940	6,334	8,695	15,029
November, 1940 ...	4,588	6,202	10,790
December, 1940 ...	3,793	5,044	8,837
January, 1941	1,550	2,021	3,571
February, 1941 ...	793	1,068	1,861
March, 1941	4,298	4,794	9,092
April, 1941	6,131	6,900	13,031
May, 1941	5,520	5,207	10,727
June, 1941	406	461	867
July, 1941	501	447	948
August, 1941	169	136	305
September, 1941 ...	217	269	486
October, 1941	262	361	623
November, 1941	89	155	244
December, 1941	34	55	89

CANADA

ARMOURED DIVISION.—The arrival in Britain of the 5th Canadian (Armoured) Division, under Major-General E. W. Sansom, D.S.O., was completed last November.

2ND DIVISION.—Lieut.-General H. D. G. Crerar has been appointed to command the 2nd Canadian Division, and reverts to the rank of Major-General.

C.G.S.—Major-General K. Stuart, former Vice-Chief, has been appointed Chief of the General Staff in Canada.

AUSTRALIA

CASUALTIES IN MIDDLE EAST.—It was officially announced on 14th November, 1941, that the casualties of the Australian Imperial Force up to that date, in Cyrenaica, Greece, Crete, Syria and Palestine, totalled 12,932, *i.e.*, 1,571 killed or died of wounds, 4,663 wounded, 3,663 missing, and 3,035 prisoners.

AUSTRALIAN ARMY CORPS.—General Sir Thomas Blamey, Deputy Commander-in-Chief, Middle East, stated last November that the A.I.F. in the Middle East would henceforth fight as a self-contained army corps and not, as hitherto, as separate divisions. In December the Australian War Minister announced that the A.I.F. in the Middle East was concentrated in Palestine and Syria as a unified force.

INDIA

VICTORIA CROSS PRESENTATION.—On 10th November, 1941, the Viceroy presented Victoria Crosses to Lieutenant Premindra Singh Bhagat (the first Indian to win this award during this war) and to the widow of Subadar Richpal Ram, at a ceremonial parade in the forecourt of Viceroy's House, Delhi.

CYPRUS

The Cyprus Regiment, which was formed soon after the outbreak of the war, has acquitted itself well. The regiment includes infantry, pioneer and transport units. Two Cypriot transport companies served in France. The official list of casualties in the Regiment up to November, 1941, totalled 2,420 killed, wounded and missing on all fronts, the heaviest losses being incurred in Greece and Crete. Voluntary recruiting for the Cyprus Regiment still proceeds steadily.

ALLIED FORCES

On 1st December, 1941, the first units of the Yugoslav Army reforming in Britain paraded in Scotland; at present they form part of the Polish Army.

It was also announced that the first contingent of Danish volunteers had arrived in Britain from the United States and Canada; they will form a Danish company of The Buffs (Royal East Kent Regiment), of which King Christian is Colonel-in-Chief.

On 3rd December it was reported in London that a third contingent of Belgian troops trained in Canada had arrived in Britain.

General Sikorski, the Polish Prime Minister and Commander-in-Chief, who had recently returned from a mission to Russia, stated in London on 9th January that the Polish Army in Russia was to be raised to six divisions—about 100,000 men in all. M. Stalin had agreed that 25,000 Polish soldiers should leave Russia to complete the Polish army corps in the Middle East and in Great Britain.

AIR NOTES

ROYAL AIR FORCE

Appointments

The Air Ministry announced on 14th November that with a view to reducing the demands made by the R.A.F. on the man and woman power of the country, it had been decided to strengthen the existing safeguards against excessive establishments. The Secretary of State for Air had accordingly invited Air Chief Marshal Sir Hugh Dowding to undertake a review of the establishments of the R.A.F. in the United Kingdom. The review will be directed to ascertaining whether, and if so in what particulars, the establishments can be reduced without prejudice to operational efficiency. Air Chief Marshal Dowding had accepted the invitation and was entering upon his duties at once.

The *London Gazette* of 14th November announced: The notification of 21st October, 1941, concerning the retirement of Air Chief Marshal Sir Hugh C. T. Dowding, G.C.B., G.C.V.O., C.M.G., A.D.C., to be cancelled. Air Chief Marshal Sir Hugh Dowding to be placed on the half pay list, scale A, 1st October, 1941, and to be restored to full pay, 10th November, 1941.

Air Commodore J. B. Cole-Hamilton, C.B.E., has been promoted to the acting rank of Air Vice-Marshal (21st November, 1941) and appointed Air Officer Commanding, Northern Ireland.

Major-General C. F. Liardet has been appointed Director-General of Ground Defence in the Air Ministry, and Commandant of the Royal Air Force Regiment. (See Aerodrome Defence.)

Air Commodore A. P. M. Sanders, formerly Director of Ground Defence, becomes Director of Ground Defence Planning and Assistant Commandant of the Royal Air Force Regiment.

The Air Ministry announced on 9th January that Squadron Leader Wedgwood Benn had been appointed Director of Public Relations at the Air Ministry, in succession to Air Commodore Harald Peake, who had been appointed Director of Welfare. Squadron Leader Wedgwood Benn has been granted the acting unpaid rank of Air Commodore.

Retirement

Air Commodore Patrick Huskinson, it was announced on 12th January, is retiring from the R.A.F. and from his post as Director of Armament Production at the Ministry of Aircraft Production and will take up advisory duties on armament in a civilian capacity at the Ministry. Air Commodore Huskinson, who is an authority on bomb designing, was injured in the eyes and temporarily blinded while watching the effect of blast from German bombs during an air raid on London in April, 1941. He was awarded the C.B.E. in the New Year Honours.

Honours and Awards

The following were among the appointments in the New Year Honours published on 1st January:—

K.C.B.—Air Marshal Arthur W. Tedder.

C.B.—Air Vice-Marshal G. B. A. Baker, Air Vice-Marshal W. A. McClaughry, Air Vice-Marshal L. D. D. McKean, Air Vice-Marshal C. E. H. Medhurst, Air Vice-Marshal J. C. Slessor, Acting Air Vice-Marshal L. N. Hollinghurst, Acting Air Vice-Marshal H. P. Lloyd, Air Commodore W. A. Coryton, Air Commodore H. Leedham, Air Commodore R. P. M. Whitham.

A number of appointments to the Order of the British Empire in the grades of C.B.E., O.B.E., and M.B.E. were also notified, as well as several awards of the Air Force Cross.

Personnel

University Courses.—Results of the first series of courses for R.A.F. candidates at the universities were very successful; 99 per cent. of the candidates passed and were recommended for commissions as pilots in the R.A.F. Of the 500 candidates selected for the second series of courses, over 200 came from secondary and technical schools. The 500 were distributed as follows:—Oxford, 79; Cambridge, 99; Manchester, 48; Southampton, 26; Belfast, 28; St. Andrews, 59; Aberdeen, 31; Durham, 55; Edinburgh, 43; and Glasgow, 32. The third series is due to start in April and will last for about six months.

Army Co-operation.—Squadrons of the Army Co-operation Command are now assisted by officers from the British Army known as Air Liaison Officers, whose chief duty is to establish close association between an Army formation and the attached Army co-operation squadrons. These officers have a thorough knowledge of Army requirements and methods. At a School of Army Co-operation they pass through a special course before joining the Air Liaison Section of one of the Army Co-operation Command squadrons. Since an A.C. squadron may have to move at short notice, Air Liaison Officers work in a mobile trailer, and in exercises and actual warfare it is around this "office" that the activity of the squadron is mainly concentrated. The task of an A.L.O. is a very responsible one. Upon his understanding of a pilot's report and his accuracy in interpreting information revealed by a reconnaissance from the air may depend the success of an Army commander's plan.

R.A.F.V.R. Commissions.—The Air Ministry announced on 18th December that, for the time being, no more applications from civilians for commissions in the Equipment, Accountant, and Administrative and Special Duties Branches of the R.A.F. Volunteer Reserve would be considered. A few vacancies may arise from time to time for men with special qualifications, and steps will be taken to obtain candidates as these vacancies occur. There are still vacancies in the Technical Branch for men possessing high technical qualifications.

Women's Auxiliary Air Force

Army Co-operation.—W.A.A.F. officers and airwomen are now working for the Army as well as for the Air Force in home units of the Army Co-operation Command. Their duties include work on codes and cyphers, the custody and distribution of secret and confidential documents, and clerical and administrative work. They also act as motor drivers for both R.A.F. and Army personnel of the Command. At one headquarters an officer of the W.A.A.F. is assisting in the Intelligence Section, working directly under an Army officer. At a training centre for British parachute troops, airwomen are engaged in packing and re-packing parachutes used in practice drops from troop-carrying aircraft.

Battle Dress.—A working dress is now being issued to W.A.A.F. personnel similar to the air crew suits of the R.A.F. or the Army battle dress. It consists

of blouse and trousers of Air Force blue serge, cut on the loose side with ample pockets, and is designed primarily for women engaged on rough work such as balloon handling, to be worn only when at work. The walking-out dress will remain tunic and skirt. R.A.F. ankle boots are being issued for wear with working dress.

AIRCRAFT MECHANICS.—The recent experiment of training women for work on engines and airframes having proved successful, it will probably be continued on a larger scale. Results obtained in the first examination for W.A.A.F. mechanics compared very favourably with those on similar lines for airmen. In a joint class, the highest number of marks was gained by a member of the W.A.A.F.

WEATHER FORECASTING.—Commissions in the W.A.A.F. are being offered to women as weather forecasters in the Meteorological Branch. Qualifications required are high, including a science degree in mathematics or physics. Specialized training is given after acceptance, followed by a practical instruction at a meteorological office attached to a R.A.F. station. Candidates must be British subjects under 41.

AERODROME DEFENCE

In a review of the war given when the House of Commons met on 8th January, Mr. Attlee, in the absence of the Prime Minister in Washington, dealt with the question of the defence of aerodromes. He said that as a result of a careful study of campaigns oversea, and of the conditions which were likely to occur during an attempted invasion of this country, the Government had carried into effect during some months a considerable development of their plans for defending aerodromes. Great progress had been made in arming and training a large number of the R.A.F. technical, maintenance, and other personnel of aerodromes so that they could take their proper and considered defence of their own stations. As a result of these experiences a further decision of far-reaching importance had been taken. It had been decided that while Army responsibility for ground defence as a whole must be maintained, the R.A.F. should, as the Army's agent, and under military direction, undertake the entire local defence arrangements at its aerodromes in this country. As a majority of air force personnel on the aerodromes was to have personal weapons, and to take part in their defence, it was right that the regular garrison should be composed, not as now of soldiers under the control of the military authorities, but of personnel forming part of the R.A.F. Therefore, a corps of aerodrome defence troops under the executive and administrative control of the Air Council would be formed for that purpose. The corps, which would be called " The Royal Air Force Regiment," will be organized, trained and equipped for the particular task of local aerodrome defence, and its units would possess a number of armoured fighting vehicles and artillery weapons as well as the normal infantry arms.

Major-General C. F. Liardet, who was until recently Inspector of Aerodrome Defence, had been appointed Director-General of Ground Defence in the Air Ministry. As the senior officer of the regiment, although not exercising operational control, he would be given the title of Commandant. He would be assisted by a number of other Army officers, many of senior rank and high qualifications, who were being lent to the R.A.F. for this purpose.

Under this new system the Commander-in-Chief, Home Forces, who was responsible under the War Office for the land defence of the British Isles, would decide the strength and location of the aerodrome garrisons to be provided by units of " The Royal Air Force Regiment," and would indicate to the Air Ministry

the nature of the tactical methods of defence he wished to be adopted. He would also have the right to satisfy himself, through his representatives, that proper measures to implement general policy were being taken and were effective. Ministry of Aircraft Production aerodromes would be included in the scheme. The Admiralty were taking similar action for the naval air stations.

AUSTRALIA

SQUADRONS IN MALAYA.—On 7th November it was announced at Singapore that a new fighter squadron which had been formed in Malaya was manned by pilots trained in Australia under the Empire air scheme. The squadron, equipped with Brewster Buffaloes, was commanded by an Englishman, a 25-year old squadron leader, who was the only non-Australian in the unit. On 5th December, it was announced that a squadron of Australian-built Bristol Beaufort bombers had arrived at Singapore that day. It flew from Sydney to Darwin on the first day and continued to Singapore by way of Sourabaya. It was manned by crews composed equally of Australians and men of the R.A.F. It was also stated officially that as the Australian output increased it was expected soon to reach at least one bomber daily, and Malaya would receive growing numbers of these aircraft.

CANADA

PRODUCTION.—On 5th November, Mr. C. D. Howe, Minister of Munitions, stated that 3,749 aircraft had been manufactured or assembled, and the present output averaged 40 a week. The newest type of four-engined bomber and a new type of fighter would be manufactured in Canada.

AIRMEN IN BRITAIN.—In a broadcast talk on 5th December, Mr. Floyd Chalmers stated that there were 13,000 Canadian airmen in Great Britain.

"U.S.A." BADGE.—Under a recent R.C.A.F. order, officers and airmen belonging to the Royal Canadian Air Force who are United States citizens are entitled to wear the symbol "U.S.A." as a shoulder badge below the albatross if they joined the Service since the War began. In Canada, only the initials "U.S.A." are worn. In Britain and elsewhere overseas the word "Canada" also forms part of the shoulder badge, above the albatross where this is worn.

JAMAICAN CONTINGENT.—A party of 30 Jamaicans, it was announced on 7th January, had arrived in England via Canada to train for air crew duties in the R.A.F.

NEW ZEALAND

PILOT'S GALLANTRY.—The attention of all ranks in Bomber Command was drawn in November to the courage and devotion to duty of the captain and wireless operator of a Whitley bomber, engaged in an attack on Hamburg, who carried out their task and returned safely although both rudder controls were shot away, a wing tank was holed, and the wireless operator wounded. The captain—a New Zealand pilot officer—kept control, taking such evasive action as was possible without a rudder. He ran into very bad weather, and the aircraft was iced up in the clouds, but the pilot managed to get home.

SOUTH AFRICA

AIR TRAINING.—In an address at Pretoria on 3rd November, General Smuts (according to a correspondent of *The Times*) said :—"When we were asked to let our men join Canadian air schools we refused, as we wanted to train our men here,

but we made the offer that Canadians could train with our men here. The offer was accepted, and the result is that young airmen and mechanics are coming in their thousands. Within a few months we shall have 24 air schools in South Africa where we shall be able to train thousands of men every year."

MIDDLE EAST SERVICE.—An instance of devotion to duty in December led to the safe return of a large Middle East bomber force, made possible only by the sacrifice of a fighter squadron of the South African Air Force. Several fighter squadrons were to have escorted the bombers, but heavy mist over a wide area made it impossible for the fighters to join them, and they proceeded escorted only by the South Africans. After bombing the target, a large force of Me. 109 F's appeared, completely outnumbering the escort. A dogfight ensued which enabled the bombers to return unmolested and in which the South Africans, engaged with the most formidable fighters the Germans possess, shot down one of them and damaged several others. They fulfilled their purpose of protecting the bombers, but four fighter aircraft of the South African squadron failed to return.

SOUTHERN RHODESIA

AIR TRAINING.—Colonel E. Lucas Guest, Minister of Mines, Works and Air for Southern Rhodesia, visited London in January to confer with the Air Ministry on the Rhodesian Group of the Empire Air Training Scheme. This group has elementary and advanced flying training schools for pilots, air observers and gunners from the United Kingdom, Australia, South Africa and Kenya as well as Rhodesia. These schools are at Salisbury, Bulawayo, Gwele, Mount Hampden, Kumala, Heany, Imduna and Guinea Fowl. The last-named was constructed from virgin soil and made ready for service in 11 weeks.

INDIA

GIFTS TO R.A.F. SQUADRONS.—R.A.F. personnel serving in Indian squadrons are constantly reminded of the interest taken in their work by all communities and sections in India. Members of an East India Squadron received a set of handsome silver tankards, the gift of the East India Fund Committee in Bengal. A considerable sum was received for Christmas festivities by the members of the Hyderabad Squadrons from the people of Hyderabad and Secunderabad. A substantial surplus was devoted to bereaved families of former members of the squadrons through the R.A.F. Benevolent Fund. The Madras Squadrons also received a generous Christmas gift from the Joint War Charities of Madras.

INDIAN STUDENTS.—About 100 Indians who were students in England at the outbreak of war are now in the R.A.F., and some 40 hold commissions. Among them are pilots of the latest fighter aircraft. Others are members of bomber crews; at least one knows the way to Berlin and back.

MYSORE SQUADRON.—When No. 129 (Mysore) Squadron took its place with the operational squadrons of the R.A.F. Fighter Command in September last it already had two enemy aircraft to its credit, shot down while still in training. The squadron has since taken part in several offensive operations over Northern France.

FOREIGN

NETHERLANDS

A new Dutch decoration—the Vlieger Kruis or Flying Cross, equivalent to the D.F.C.—was presented to three officers and five N.C.O's of the Royal Dutch Naval Air Service at a Coastal Command aerodrome recently.

The Vlieger Kruis was instituted not long ago by Queen Wilhelmina, and the ceremony was carried out by Rear-Admiral J. W. Termyjtelen, Commanding the Royal Dutch Navy in Britain. The men belong to a squadron which has been serving with the Coastal Command of the R.A.F. in reconnaissance work and attacks on enemy shipping in the North Sea.

UNITED STATES

American Military Aviation has a structure and organization which differs from the Royal Air Force. Primarily it consists of two main departments—the supply and training, and the combat or " operational " units. The whole is grouped in the newly constituted Army Air Forces, whose chief is Lieut.-General Arnold. The supply and training side constitutes the Army Air Corps under Major-General Brett, and the striking units (fighters, bombers, etc.) are grouped in the Air Force Combat Command whose Chief is Lieut.-General Emmons.

Lieut.-General Henry H. Arnold is a Pennsylvanian ; he was born in 1886, and graduated at West Point in 1907. Apart from his work as Chief of the Army Air Forces, General Arnold is a prolific writer of books on the air.

Former Chief of Wright Field—the American Army's Farnborough, where research and development work is done—Major-General George H. Brett has taken command of the U.S. Army Air Corps at a time when it has embarked on a vast plan of expansion. Like General Arnold he, too, was born in 1886. General Brett is a former cavalry man. Born in Ohio he was a graduate of Virginia Military Institute, America's famous private military school which also produced General Marshall, U.S. Chief of Staff.

Chief of the Air Force Combat Command—which embraces what in the R.A.F. are the bomber, fighter and army co-operation squadrons—is Lieut.-General Delos C. Emmons. Graduating from West Point in 1909 he was for a time an infantry officer. Then he entered Aviation through the Signal Corps. In 1939 he led the squadron of " Flying Fortresses " which flew in formation to Brazil. Born in 1888, Emmons is at 53 one of the youngest officers to hold General rank in the U.S. Army. General Emmons' Combat Command in reality includes four air forces, each covering a geographical area of the U.S.A. These are North East, South East, and North West and South West. Each force has a bomber, an interceptor and an air support command.

Next among the U.S. Air Chiefs is Brigadier-General Carl " Tuoy " Spaatz, Chief of Air Staff under General Arnold. He is the youngest of the " Big Seven," being in the early forties. A Pennsylvanian, he passed out of West Point in time to get into action against the Germans in the last war, when he won the American D.F.C. Before he became C.A.S. he was Chief of Air Plans.

REVIEWS OF BOOKS

GENERAL

From Tobruk to Smolensk. By *Strategicus*. (Faber and Faber.) 6s.

This excellent book by a well-known military critic is his third of a series of contemporary histories of the War. The period covered in this volume ranges from December, 1940, to mid-August, 1941. Writing on broad lines, the author gives a clear picture of the course of operations, and his comments and criticisms are always deserving of respectful consideration.

A Mathematical Refresher. By A. Hooper, M.A., Squadron Leader R.A.F.V.R. (Oliver and Boyd.) 9s. 6d.

This book should prove useful to all those men in the Services, and to R.A.F. personnel in particular, who require a thorough knowledge of mathematics as a first essential to their training. It should also appeal to a wider circle including anyone who wishes to brush up his (or her) mathematics. It is not intended for beginners, but aims at giving a clear grasp of all the essentials of Arithmetic, Algebra, Geometry and Trigonometry.

NAVAL

Sea Power in the Machine Age. By Bernard Brodie. (Princeton University Press and Oxford University Press.) 22s. 6d.

Although the author is sometimes a little prejudiced in his views, this is a remarkably good book on a very important aspect of war and one which is all too often neglected. A college-trained engineer, Mr. Brodie became interested in aviation through his work as a meteorologist, and in national defence as an artillery officer in the National Guard. His interest in the Navy would seem to have come later, partly through his post-graduate university studies in international relations, and this combination of interests has fitted him particularly well to trace the influence of rapidly developing naval material on international politics and relations.

At first sight it would appear that he was covering old ground by recounting the material side of naval progress in detail from the early days of the XIXth Century ; but his outlook is refreshingly novel and there are few of his arguments, many of them a little startling, which can be passed without careful consideration.

The first three of the book's five parts deal with the development of steam machinery, the development of the iron hull, and the long struggle between gun and armour ; the fourth part, which is the longest, deals with the torpedo, mine and submarine ; and the fifth with aircraft. Naval invention and national policy provide a conclusion.

The author presupposes a reasonable amount of technical knowledge on the part of his readers, is generous with his dates and authorities and sparing with his figures. A very large proportion of his authorities are British and American, consulted with scrupulous fairness, but in some sections he would seem to have paid too little attention to the Continental authorities. This is especially noticeable in the later chapters which deal with the last war and the lessons to be drawn from it. One feels that little use has been made of German, and still less of French and Italian sources, although it must be admitted that this does not produce any feeling of serious omission in the reading of the book itself.

In his early chapters the very shrewd remarks that he makes on many points—some well known, some not—are valuable. This particularly applies to his side-

lights on the very great influence of the Emperor Napoleon III on British naval affairs—an influence which is all too little appreciated. He is quite outspoken in his opinion of certain actions by the various countries, but he is just as frank with his own. His few lines on the position of the United States sailing navy having to implement the Monroe Doctrine are all the more cutting because of their moderation. He gives chapter and verse from Hansard concerning the little-known incident of Admiral Sir Charles Napier during the debate on the Naval Estimates of 1858, when the question of iron ships was being hotly discussed. The Admiral repeated to the House the recommendation that he had made to the former Board of Admiralty, that they should take an old three-decker, cut her down and plate her with armour, moor her within musket shot of an ordinary three-decker and let the two of them shoot it out. When this suggestion was greeted with laughter he amplified it by suggesting that the crews should be exchanged between broadsides.

Dr. Brodie also gives full official references to the manner in which the First Lords of both parties evaded any reference to the iron hulls of the "Warrior" and "Black Prince"—a good indication of the strong feeling that was aroused at the time, and effectively disproves the oft-repeated statement that the Admiralty's reason for continuing to build wooden-hulled ironclads after the "Warrior" and "Black Prince" was their desire to use up large stocks of ship-building timber that they had on hand. The great influence of fouling on the whole of the Navy during the early era of the iron hull may seem to be rather outside the author's main theme, but it is a most interesting point which is not very generally appreciated.

At a later stage in the book he is equally shrewd in his remarks on the political side of modern naval history. He uses striking common-sense on the fatuity of the limitation agreements and "the first Power that chooses to violate them." Another telling minor point out of any number may be quoted: "As improvements in naval material gained in complexity the public lost interest in details." That might well serve as a text for an essay on the Navy's troubles with Parliament and public.

The chapters on the use of the torpedo, mine and submarine, and of aircraft, during the late war are quite adequate by their concentration, but the chapter on the unlearned lessons of the first submarine war, and their application in the present struggle, is perhaps the best in the book, and should arouse sympathy for the Anti-Submarine Branch of the Navy, which had to make bricks with very little straw, while public and Parliament found that "it was a much more comforting thought that they had, after all, defeated the submarine once and that they would do it again, if they had to, with far greater ease."

There are a certain number of slips in the book which are annoying, such as "casement" for "casemate," and the statement that the "Audacious" was sunk by a mine laid by a submarine, instead of by the auxiliary minelayer (former North German Lloyd liner) "Berlin." In spite of these, it is a book to be recommended on account of its wide views, sane outlook and scrupulous fairness, although some examples of the last-named quality may be unpalatable to some British and American readers.

The Fight for Gallipoli. By Admiral of the Fleet Sir Roger Keyes, Bt., G.C.B., K.C.V.O., D.S.O. (Eyre & Spottiswoode.) 12s. 6d.

This is a reprint of the author's Naval Memoirs, which were reviewed in the JOURNAL for November, 1934; but he has written a new Foreword in which he

implies that the object of this republication is to assist the conduct of the present war by " the study of the successes and failures of the past " as represented by the Dardanelles Campaign.

One of the lessons which he draws, and which he has dealt with more extensively in a recent article in the Press, is the vital necessity for the co-ordination of naval and air forces when they are engaged on the same operations. Sir Roger Keyes has never ceased to argue that this cannot be assured until the Navy has all the requisite air forces it requires under naval command. These cannot in the nature of things, he maintains, be provided by the Fleet Air Arm, limited as it is at present to ship-borne aircraft, but must also include " all aircraft that work with and against ships, whether their undercarriages are wheels, floats or boats, and whether they are maintained at shore bases, or carried in ships," to quote from his newspaper article. Although aircraft were in a very early stage in Gallipoli days, they did useful work in spotting ship's gun fire and short-range reconnaissances. To-day, of course, they provide indispensable cover for ships operating within striking distance of enemy bombers as well as performing their traditional functions as the " eyes of the fleet."

We have had lesson after lesson in this war, culminating in the loss of the " Prince of Wales "and " Repulse," that it is courting disaster to send ships into waters dominated by enemy air forces without a strong fighter escort. As well might our battle fleet have fought Jutland without a destroyer escort. No naval commander in his senses would keep his ships under the continual fire of powerful coastal batteries, so why should they be expected to fare better as targets for intensive and repeated bombing or torpedo attacks.

On those grounds alone—and there are numerous others—the logic of Sir Roger Keyes' arguments seems irrefutable, and surely by now it should be possible to allow the Navy all the aircraft it needs of whatever type and for whatever functions without robbing the Royal Air Force to provide them.

But there is another lesson to be learnt from the Dardanelles campaign, and one which has already been repeated in this war ; it is that battleships should not be used as Coast-Attack Ships. They are for " open water " fighting, not for the narrow seas. As Lord Chatfield has put it, they are " full-backs " not " spear heads." At Gallipoli we used old battleships—of which we then had a goodly number—and their casualties were high. On the Belgian coast, where there were the heaviest shore defences the world has ever seen, we had " monitors "—Lord Fisher's Coast-Attack Ships, and we lost *none*. The situation in the Mediterranean, at Singapore, and potential requirements nearer home all clamour for a modern form of " monitor." Had we possessed such ships we should still have the " Prince of Wales," " Repulse," " Barham " and also many a useful cruiser for their legitimate work. It is strange that that other vital naval lesson of the last war has not been drawn by a former Vice-Admiral of the Dover Patrol.

MILITARY

A Thousand Shall Fall. By Hans Habe. (Harrap.) 10s. 6d.

This is a fine book which can be highly recommended.

The author, an anti-Nazi Austrian, joined the 21st Foreign Volunteers of the French Army when that regiment was formed in the autumn of 1939. His account of the downfall of France as he saw it in the summer of 1940 is moving, tragic and extremely interesting. Habe was taken prisoner. He spent two months in

captivity; then managed to escape; and after many adventures finally reached the United States in December, 1940.

The Roll of the Drum: Histories of the Regiments of the British Army. Edited by Wolmer Whyte. (Hutchinson & Co.) 1s. each.

Hutchinson & Co. are publishing, at 1s. each, short histories of Regiments of the British Army. Not intended to be full or complete records, these volumes are written in popular style and are very readable. They summarize the story of the Regiment concerned from its formation up to the beginning of the present war, noting especially occasions when special distinction was earned and not omitting mention of those special idiosyncrasies and traditions that help to foster esprit-de-corps. The histories published up to date include the story of the Royal Fusiliers, Devonshire Regiment, Cameronians, King's Own Yorkshire Light Infantry, Middlesex Regiment, King's Royal Rifle Corps, and Manchester Regiment.

House to House Fighting. By Colonel G. A. Wade, M.C. (Gale and Polden.) 1s. 6d.

The Art of Prowling. By Colonel G. A. Wade, M.C. (Gale and Polden.) 1s.

These are the first of a series of training pamphlets being published by Messrs. Gale and Polden. All the books have been approved by the War Office. The instruction is given in a concise and readable form, with numerous good illustrations and simple plans to elucidate the text.

A History of the Uniforms of the British Army. By Cecil C. P. Lawson. Vol. 2, 1714–1760. (Peter Davies.) 17s. 6d.

The second volume of Mr. Lawson's book was reviewed in the last number of the JOURNAL when the price was given as 15s., as the announcement that it had been altered to 17s. 6d. was received too late to make the necessary correction.

ADDITIONS TO THE LIBRARY

GENERAL

A MATHEMATICAL REFRESHER. By Squadron Leader A. Hooper, R.A.F. 8vo. (Oliver & Boyd.) 9s. 6d. Presented.

MR. CHURCHILL. By Philip Guedalla. 8vo. (Hodder & Stoughton, Ltd.) 8s. 6d.

THE LOST PEACE. By Harold Butler. 8vo. (Faber & Faber.) 10s. 6d.

DIPLOMATICALLY SPEAKING. By Lloyd C. Griscorn. 8vo. (John Murray.) 16s.

THE SURVIVAL OF POLISH CIVILIZATION. By A. Bruce Boswell. Historical Association Pamphlet No. 120. 1s. 1d. (Roborough Library, University of the South-West, Exeter, Devon.)

TRANSPORT AND SPORT IN THE GREAT WAR PERIOD. By Captain A. O. Temple Clarke. 8vo. (Quality Press, 1938.) 7s. 6d. Presented by the Author.

THE LIFE OF GENERAL SIR CHARLES WARREN, G.C.M.G., K.C.B., F.R.S., COLONEL COMMANDANT ROYAL ENGINEERS. By Watkin Williams. 8vo. (Basil Blackwell, Oxford.) 25s.

WANTED—A NEW VISION. By Axel Heyst. 8vo. (Minerva Publishing Co., Ltd.) 6s. Presented.

MEDITERRANEAN FRONT. By Alan Moorehead. 8vo. (Hamish Hamilton.) 10s. 6d.

THE SOVIET FIGHTING FORCES. By Major A. S. Hooper. 8vo. (Frederick Muller.) 1s.

THE OCEAN IN ENGLISH HISTORY. By J. A. Williamson. 8vo. (Oxford University Press.) 10s. Presented.

FROM TOBRUK TO SMOLENSK. By Strategicus. 8vo. (Faber & Faber, Ltd.) 6s. Presented.

ECONOMIC PEACE AIMS. By O. Dutch. 8vo. (E. Arnold & Co.) 12s. 6d.

THE SEVENTH QUARTER, APRIL 1ST–JUNE 30TH, 1941. By P. P. Graves. 8vo. (Hutchinson & Co.) 9s. 6d.

NAVAL

THE BARRINGTON PAPERS, VOL. II. Selected from the letters and papers of Admiral the Hon. Samuel Barrington and edited by D. Bonner-Smith. 8vo. (Navy Records Society.)

SEA POWER. By T 124. New and revised edition. 8vo. (Jonathan Cape.) 8s. 6d.

SEA POWER IN THE MACHINE AGE. By Bernard Brodie. 8vo. (Oxford University Press.) 22s. 6d. Presented.

MILITARY

LEADERSHIP—FOR AMERICAN ARMY LEADERS. By Major E. L. Munson. 8vo. (Infantry Journal, Washington.) $1.00. Presented.

PRACTICAL MAP READING—RECONNAISSANCE MAP READING—FIELD SKETCHING. By J. M. Holmes. 8vo. (Angus & Robertson.) 5s. 6d. Presented.

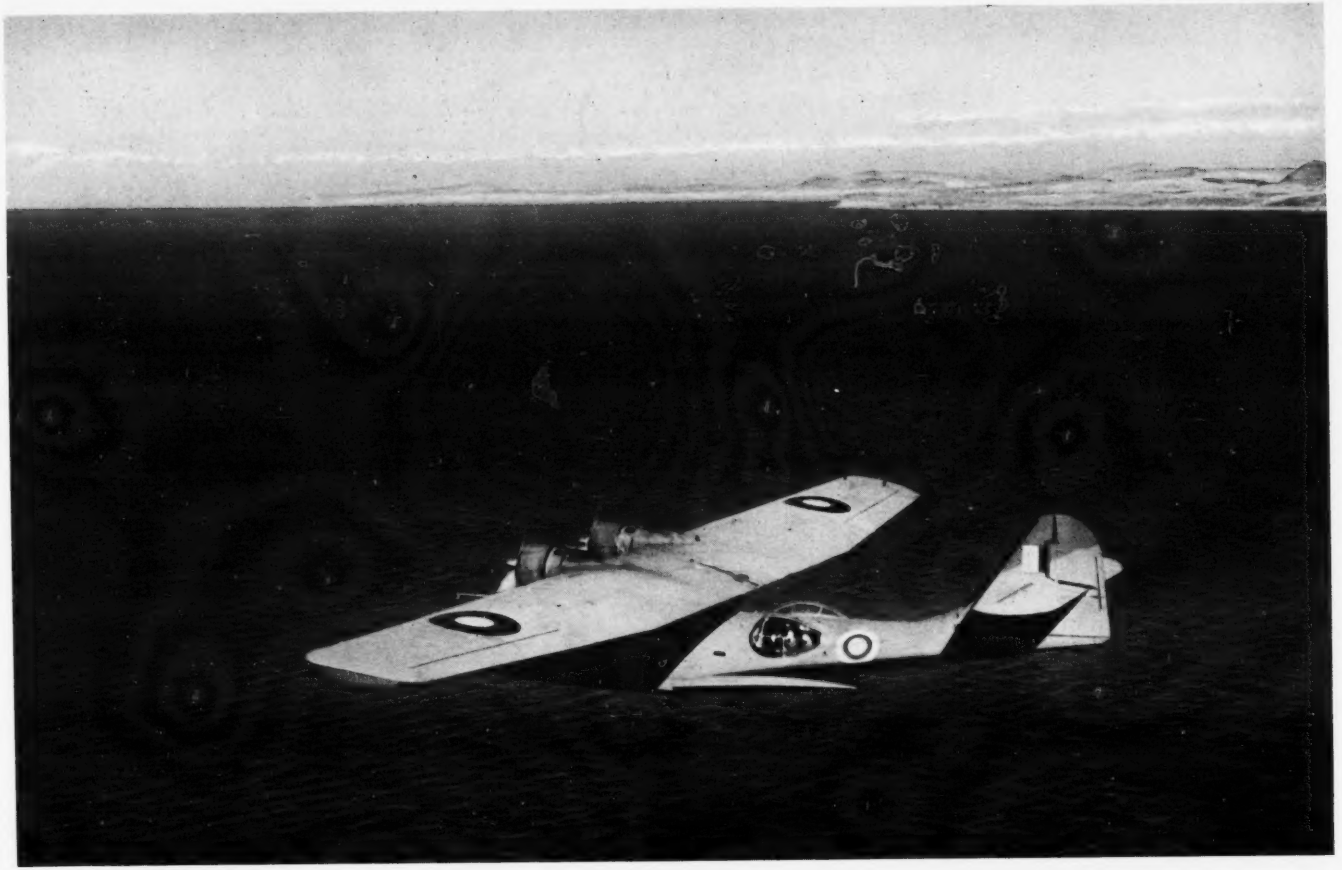
HISTORY OF THE GREAT WAR—MILITARY OPERATIONS, EAST AFRICA. VOL. I. AUGUST, 1914–SEPTEMBER, 1916. Compiled by Lt.-Colonel Charles Hordern. 8vo. (H.M.S.O.) 21s. Presented.

A THOUSAND SHALL FALL. By Hans Habe. 8vo. (Harrap & Co., Ltd.) 10s. 6d. Presented.

A HISTORY OF THE UNIFORMS OF THE BRITISH ARMY. Vol. II. By Cecil C. P. Lawson. 8vo. (Peter Davies.) 17s. 6d. Presented.

CORRECTION

ARTILLERY OBSERVATION POSTS. By Captain N. D. James. This book is published by A. Wheaton & Co., Ltd., and not by Neston & Co. as stated in the November Journal.



COASTAL COMMAND

A CATALINA FLYING BOAT

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